

## Olivier Devillers : Curriculum Vitae

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Prénom : Olivier  
Date de naissance : 9 décembre 1963  
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## Formation

- Diplômes
  - Admission à l'École Normale Supérieure, promotion 1983.
  - Maîtrise de Mathématiques à l'Université Paris 7, juin 1984.
  - DEA d'Informatique de l'Université Paris 11, septembre 1985.
  - Thèse d'Informatique de l'Université Paris 11, soutenue le 20 juin 1988 [10].
  - Habilitation à diriger des recherches, Université de Nice, soutenue le 23 novembre 1993 [9].
- Emplois
  - Chargé de Recherche INRIA à Sophia Antipolis, de septembre 1989 à 2001.
  - Directeur de recherche (2ème classe) INRIA à Sophia Antipolis, de septembre 2001 à octobre 2014.
  - Chargé d'enseignement à l'École Polytechnique à temps partiel, de 1997 à 2003.
  - Professeur chargé de cours à l'École Polytechnique à temps partiel, de 2003 à 2009.
  - **Directeur de recherche INRIA à Nancy**, depuis novembre 2014 (DR 1ère classe depuis 2016).

## Domaines de recherche

En **géométrie algorithmique** je me suis intéressé notamment aux aspects suivants :

- Algorithmes randomisés
- Algorithmes sur les cercles et sphères
- Planification de trajectoires
- Conception de prédicats robustes
- Méthodes de perturbation symboliques
- Triangulation de Delaunay
- Structures compactes et compression de modèles géométriques
- Algorithmes de localisation
- Analyse probabiliste des structures géométriques

## Responsabilités

Membre du conseil d'administration de l'AFIG 1992-1993.

Responsable permanent des projets INRIA PRISME puis GEOMETRICA de 1998 à 2007.

Membre de la commission détachements 2000-2004.

Président du CUMI de 2001 à 2004 (comité des utilisateurs des moyens informatique de l'INRIA Sophia-Antipolis).

Élu au comité de centre 2004-2008.

Membre du conseil scientifique de l'école doctorale STIC de l'université de Nice 2003-2007.

Chargé de mission INRIA *Géométrie et réseaux*, 2007 [222].

**Responsable de l'équipe projet GAMBLE créée le 1 janvier 2017.**

Élu au conseil du pole scientifique AM2I de l'Université de Lorraine.

## Collaborations, financements

J'ai été responsable pour le projet PRISME des collaborations (financées) suivantes :

PAI avec l'Autriche (U. de Graz) [1995-1996],

ARC INRIA Fiable [1998-1999],

PAI avec l'Espagne (U. de Catalogne) [2000-2001],

ARC INRIA Visi3D [2000-2001] <http://members.loria.fr/SLazard/ARC-Visi3D/>,

ARC INRIA Costic [2000-2001].

Puis pour le projet GEOMETRICA de

l'ARC INRIA Telegeo [2002-2003] <http://www-sop.inria.fr/prisme/telegeo/>,

l'ACI Masse de données GEOCOMP [2004-2007] <http://www.lix.polytechnique.fr/Labo/Gilles.Schaeffer/GeoComp/>,

PAI avec l'Autriche (U. de Graz) [2007-2008],

le projet ANR TRIANGLES (responsable du projet) [2008-2011] <http://www-sop.inria.fr/geometrica/collaborations/triangles/>,

le projet ANR PRESAGE [2011-2015] <https://members.loria.fr/GMoroz/ANR-Presage/>,

projet FACEPE avec l'université de Pernambuco [2013-2014].

Puis pour le projet VEGAS

du projet ANR PRESAGE [2011-2015] <https://members.loria.fr/GMoroz/ANR-Presage/>.

Puis pour le projet GAMBLE

du projet ANR ASPAG (responsable du projet) [2018-2021] <https://members.loria.fr/Olivier.Devillers/aspag/>,

de l'équipe associée inria TRIP avec l'université Carleton [2018-2020] <https://members.loria.fr/Olivier.Devillers/trip/>.

En matière industrielle j'ai participé à des collaborations (financées) avec :

Dassault-Systèmes (1999, contrat commercialisation, hiérarchie de Delaunay),

Kreon (1999, contrat commercialisation, hiérarchie Delaunay),

EDF (2000-2001, contrat de recherche, robustesse des prédicats géométriques),

Benomad (2003, convention de recherche, compression de données géographiques),

Seemage (2004, convention de recherche, raffinement de maillage),

France-Telecom (2006-2008, contrat de recherche, approximation de diagramme de Voronoï pour des métriques ad hoc). Par ailleurs je suis auteur de parties de CGAL qui fait l'objet d'un contrat avec GEOMETRY FACTORY (Dans ce cadre, GF reverse des royalties à l'INRIA).

D'une manière plus informelle, j'ai cosigné des travaux avec une centaine de coauteurs différents. En particulier, j'ai participé à un certain nombre *workshops* d'où sont sortis de nombreux articles : Bonifaccio-1999 [123] Barbados-2003 [137, 43, 144, 136, 44, 50], Oleron-2004 [42, 132], Girona-2006 [30, 119], Barbados-2006 [127, 31, 128, 38], Ouessant-2006 [124, 39], Barbados-2010 [103, 109], Barbados-2011 [26, 107, 28] Presage-2012 [105, 25], Barbados-2013 [24, 104], Presage-2013 [300], Barbados-2016 [16, 102], Barbados-2017 [198, 193].

Et j'ai effectué plusieurs séjours courts (quelques semaines) à l'étranger (Sarrebuck [92, 286], Utrecht [76, 80], Brown University [64, 53, 77, 151, 78, 72], Mc Gill University, ACMAC (Heraklion) [205], Université de Pernambuco).

## Enseignement

- École Polytechnique : Chef de travaux pratiques puis chargé d'enseignement (1997-2003)  
Professeur chargé de cours (de 2003 à 2009)
  - 1997-98 TD de programmation débutants (2ème année) en C (13 TD x 2 groupes x 2h=52h). Projet de programmation de fin d'année.
  - 1998-99 TD de géométrie algorithmique (3ème année) avec Bernard Chazelle. Correction de l'examen de 2ème année (120 copies) Projet de programmation de fin d'année.
  - 1999-00 TD de programmation débutants (2ème année) en C, 52h. TD Initiation débutants (1ère année) en java, 20h. Projet de programmation de fin d'année.
  - 2000-01 Cours/TD Géométrie et synthèse d'images (3ème année) 14h. TD de programmation (2ème année) en java, 40h. Projet de programmation de fin d'année.
  - 2001-02 Cours/TD Géométrie et synthèse d'images (3ème année) 18h. Correction de l'examen « 1B » de 2ème année (100 copies) TD Initiation débutants (1ère année) en java, 40h. Projet de programmation de fin d'année.
  - 2002-03 Cours/TD Géométrie et synthèse d'images (3ème année) 18h. Rédaction et correction de l'examen « 1B » de 2ème année (120 copies) Correction de l'examen « IF » de 2ème année (80 copies) Projet de programmation de fin d'année.
  - 2003-04 Cours/TD Géométrie et synthèse d'images (3ème année) 20h. Rédaction et correction de l'examen « 1B » de 2ème année (120 copies) PC Informatique fondamentale (2ème année), 44h. Participation à la rédaction du sujet du concours d'entrée.
  - 2004-05 Cours/TD Géométrie algorithmique (3ème année) 36h. Rédaction et correction de l'examen « 1B » de 2ème année (120 copies) Coordination des projets de programmation de fin d'année.
  - 2005-06 Cours/TD Géométrie algorithmique (3ème année) 36h. Rédaction et correction de l'examen « 1B » de 2ème année (110 copies) Coordination des projets de programmation de fin d'année.
  - 2006-07 Cours/TD Géométrie algorithmique (3ème année) 36h. Rédaction et correction de l'examen « 421A » de 2ème année (75 copies) Coordination des projets de programmation de fin d'année.
  - 2007-08 Cours/TD Géométrie algorithmique (3ème année) 36h. Rédaction et correction de l'examen « 421A » de 2ème année (117 copies). Rédaction et correction de l'examen « 431 » de 2ème année (170 copies)
  - 2008-09 Cours/TD Géométrie algorithmique (3ème année) 36h. Rédaction et correction de l'examen « 421A » de 2ème année (140 copies)
- Maîtrise d'informatique (Nice) (2000-2008).
  - 2000-03 Cours/TD Géométrie algorithmique 8h/an.
  - 2003-08 Cours/TD Géométrie algorithmique 12h/an.
- DEA :
  - DEA d'informatique d'Orsay (2h en 1986 et 1987 et 10h en 1993),
  - DEA Math-Info à Nice (4h en 1990),
  - DEA Robotique et Vision à Nice (1990-1995, 15h/an),
  - DEA ARAVIS à Nice (1995-2000 15h/an),
  - DEA SIC à Nice (2000-2004, 15h/an) (responsable du DEA en 2003-2004)
- Écoles d'ingénieurs :
  - ENST (1987-1991, 6h/an),
  - CNAM (1988-1989, 30h),
  - INT (1989 30h),
  - ENSTA (1992-1993),
  - ISIA (2002-2005 10h/an),
  - ESSI (2002-2004 12h/an).
  - ENPC (2005 2h/an)
- Master STIC de l'Université de Nice de 2004 à 2008 :

- Responsable de la spécialité recherche « Image et géométrie pour le multimédia et la modélisation du vivant ».
- Enseignement 15h M2 : « De la géométrie algorithmique au calcul géométrique » commun à IGMMV et ISI.
- Enseignement 12h M1 : « géométrie algorithmique ».
- Master IFI de l'Université de Nice de 2008 à 2013 :
  - Enseignement M2 : « Algorithmes géométriques, théorie et pratique » (commun IFI-VIM et SI5). 24 h en 2008-2009, 16h de 2009-2010 à 2012-2013.
  - Enseignement M1 : « Géométrie algorithmique » (12h jusqu'en 2011-2012, 24h en 2012-2013).
- Cours, Université de Pernambuco, Brésil. :
  - *Delaunay triangulation and randomization*, 6h en 2013
- Master IPAC-R de l'Université de Lorraine, 2014-2018 :
  - Enseignement M2 : « Synthèse, image et géométrie » 12 h/an. <https://members.loria.fr/Olivier.Devillers/master/index-2017-18.html>
- Master Informatique de l'ENS Lyon, 2017-2019 :
  - Enseignement M2 : « Géométrie algorithmique » 12 h/an. <https://members.loria.fr/Olivier.Devillers/Master2-ENS-Lyon/>
- Master AVR de l'Université de Lorraine depuis 2018 :
  - Enseignement M2 : « Modèles d'environnements, planification de trajectoires » 18 h/an. <https://members.loria.fr/Olivier.Devillers/master/>

## Encadrement

- Encadrement d'une quinzaine de stagiaires (DEA, magistère, ingénieurs... ).
  - 1990 Chang-Sheng Zhao, Arrangement de cercles (DEA).
  - 1990 Serge Vaudenay, Diagramme de Voronoï de segments (Magistère).
  - 1991 Leonbattista Donati, Planification de trajectoires pour robots à pattes (DEA) [86].
  - 1992 Patrick Henry, Programmation d'un algorithme de localisation dynamique dans le plan (Ingénieur ESSI).
  - 1992 Sylvain Lazard, Du robot araignée au robot hemi-discoïdal (DEA) [170, 69, 86].
  - 1993 Pascal Desnoguès, Des robots et des étoiles (DEA).
  - 1997 Pierre Alliez, Métriques non euclidiennes dans CGAL (DEA) [68]
  - 1998 Pierre-Marie Gandoïn, Arrondi de diagramme de Voronoï (DEA) [68].
  - 2000 Philippe Guigue, Analyse randomisée des algorithmes en ligne dépendant de l'ordre d'insertion (DEA) [66].
  - 2001 Philippe de Montalembert, Compression d'images et triangulations (Ingénieur X).
  - 2002 Mario Trentini, Transmission progressive de modèles triangulés sur le réseau, (Ingénieur X) [139].
  - 2003 Luca Castelli-Aleardi, Canonical triangulation of a graph, with coding application (DEA) [240].
  - 2004 Abdelkrim Mebarki, Placement de lignes de courant (DEA) [231].
  - 2004 Jérôme Gahide, Compression et carte graphique (Ingénieur ESSI).
  - 2009 Laurent Caraffa, Optimisation de l'enveloppe convexe 3D dans CGAL (M1).
  - 2015 François Collet, gestion des cas dégénérés dans la triangulation de Delaunay : minimisons les angles (M2).
  - 2016 Louis Noizet, Longueurs des raccourcis dans le chemin de Voronoï [14] (L3-ENS).
  - 2017 Guillermo Reyes, Suppression dans la triangulation de Delaunay 3D (M2).
- Chercheurs doctorants :
  - Pascal Desnoguès, 1993-1996  
Financement : allocation ministère de la recherche.

- Triangulations et approximation de surfaces* [8, 166].  
P. Desnougès a ensuite été ingénieur chez NetGem  
(précurseur dans la commercialisation de "Box" TV-internet).
- Pierre-Marie Gandoin, 1998-2001  
Financement : allocation ministère de la recherche.  
*Compression de structures géométriques* [7, 61, 51].  
Accessit du prix de thèse Specif 2001.  
P.-M. Gandoin est maître de conférence à l'Université de Lyon 2  
<http://liris.cnrs.fr/membres?idn=pmgandoi>.
  - Philippe Guigue, 2000-2003  
Financement : allocation ministère de la recherche.  
*Constructions géométriques à précision fixée* [6, 52, 46].  
P. Guigue est ingénieur en modélisation 3D (Pace Aerospace, Berlin).  
[http://home.arcor.de/philippe.guigue/cv\\_index.html](http://home.arcor.de/philippe.guigue/cv_index.html).
  - Luca Castelli Aleardi, 2003-2006  
Co-encadré avec Gilles Schaeffer.  
*Représentation compactes de structures de données géométriques* [5, 131, 129, 133, 41].  
L. Castelli est maître de conférence à l'École Polytechnique  
<http://www.lix.polytechnique.fr/~amturing/>.
  - Abdelkrim Mebarki, 2004-2008  
Financement : allocation école doctorale STIC (Univ. Nice Sophia Antipolis).  
*Structure de données compactes pour la programmation des structures géométriques* [4, 36].  
A. Mebarki est maître de conférence à l'Université d'Oran.  
<http://amebarki.visiondz.info/>.
  - Pedro Machado Manhães de Castro, 2007-2010  
Financement : région PACA et ANR Triangles.  
*Méthodes pour accélérer les triangulations de Delaunay* [3, 113, 118, 29, 122, 40, 34].  
P. de Castro est professeur associé à l'Université de Pernambuco.  
<http://www.cin.ufpe.br/~pmmc/>.
  - Ross Hemsley, 2011-2014  
Financement : CORDI (INRIA).  
*Probabilistic methods for the analysis of algorithms on random tessellations* [2, 298, 105].  
R. Hemsley est ingénieur chez Citymapper.  
<https://www.ross.click/>.
  - Rémy Thomasse, 2012-2015  
Financement : région PACA et ANR Présage.  
*Complexity analysis of random convex hulls* [1, 23, 300, 301, 103].  
R. Thomasse est ingénieur chez Dassault Systèmes.  
<https://www.linkedin.com/in/r%C3%A9my-thomasse-b30ab3ba>.
  - Charles Duménil, 2016-  
Financement : Allocation de l'école doctorale AIEM (Univ. Lorraine).  
*Probabilistic analysis of geometric structures* [195].
- Chercheurs post-doctorants :
    - Alexandra Fronville, 1998-1999  
*Prédicats pour arrangements d'arcs de cercles.* [65].  
A. Fronville est maître de conférence à l'Université de Bretagne occidentale.  
<http://alexfronville.canalblog.com/>.
    - Laurent Rineau, 2006-2007  
*Approximation d'un diagramme de Voronoï par raffinement d'une triangulation de*

*Delaunay. Application à l'approximation géométrique de réseaux cellulaires.*

L. Rineau est ingénieur chez GEOMETRY FACTORY (la start-up qui commercialise CGAL).

<http://geometryfactory.com/>.

- Laurent Veysseire, 2014-2015  
*Smoothed analysis of 4D convex hull from the moment curve.*
- Jiwon Park, 2019-  
Financement : ANR Aspag et Inria.  
*Simulation of probabilistic distributions of geometric objects*

## Jurys de thèses et HDR

- Khanh Vophi, Grenoble, 1994, directeur : B. Lacolle.
- Pascal Desnoguès, Nice, 1996, directeur : O. D.
- Sylvain Lazard, Paris 6, 1996, directeur : J.-D. Boissonnat.
- Christophe Lemaire, Saint-Etienne, 1997, directeur : J.-M. Moreau.
- Seela Veerbhadeswara Rao, Inde, 1999, directeur : A. Mukhopadhyay.
- Pierre-Marie Gandoin, Nice, 2001, directeur : O. D.
- Belén Palop, Barcelone, 2003, directeur : F. Hurtado.
- Philippe Guigue, Nice, 2003, directeur : O. D.
- François Cayre, ENST, 2003, directeur : F. Schmitt.
- Narcis Coll, Barcelone, 2004, directeur : F. Hurtado.
- Geoffroy Lauvaux, Reims, 2005, directeur : Y. Gardan.
- Ali Asghar Khanban, Londres, 2005, directeur : A. Edalat.
- Gilles Schaeffer, Bordeaux, 2005 (HDR).
- Thomas Lewiner, Paris 6, 2005, directeur : J.-D. Boissonnat.
- Arnaud Gelas, Lyon, 2006, directeur : R. Prost.
- Luca Castelli Aleardi, X, 2006, directeur : O. D. & G. Schaeffer.
- David Coeurjolly, Lyon, 2007 (HDR).
- Abdelkrim Mebarki, Nice, 2008, directeur : O. D.
- Clément Jamin, Lyon, 2009, directeurs : S. Akouche & P.-M. Gandoin.
- Julien Dardenne, Lyon, 2009, directeurs : R. Prost & N. Burais.
- Tristan Roussillon, Lyon, 2009, directrices : L. Tougne & I. Sivignon.
- Pedro Machado Manhães de Castro, Nice, 2010, directeur : O. D.
- Guillaume Batog, Nancy, 2011, directeurs : S. Petitjean & X. Goaoc.
- Daniela Maftuleac, Marseille, 2012, directeur : V. Chepoi.
- Nicolas Bonichon, Bordeaux, 2013 (HDR).
- Ross Hemsley, Nice, 2014, directeur : O. D.
- Rémy Thomasse, Nice, 2015, directeur : O. D.
- Vincent Despré, Grenoble, 2016, directeur : F. Lazarus,
- Tuong-Bach Nguyen, Grenoble, 2018, directrices : D. Attali et I. Sivignon

## Orateur invité

Conférencier invité dans des conférences internationales :

- 6th Discrete Geometry for Computer Imagery, 1996, Lyon [163].
- 28th European Workshop on Computational Geometry, 2012, Assise [111].

## Responsabilité éditoriales

Éditeur de “Graphical Models”, 2010-2016.

Éditeur du numéro spécial de DCG consacré à SOCG’14 [12].

Éditeur du numéro spécial de JoCG consacré à SOCG’14 [11].

Comités de programmes de

- 7th Canadian Conference on Computational Geometry 1995,
- 12th **Symposium on Computational Geometry** 1996,
- 10th European Symposium on Algorithms 2002,
- 19th **Symposium on Computational Geometry** 2003,
- Web3D 2003
- 14th Discrete Geometry and Computer Imagery 2008,
- 13th ACM Symposium on Solid and Physical Modeling 2008,
- 27th **Symposium on Computational Geometry** 2010,
- 16th Discrete Geometry and Computer Imagery 2011 (review committee),
- 17th Discrete Geometry and Computer Imagery 2013 (review committee),
- 31th **Symposium on Computational Geometry** 2014 (**co-chair**) [13],
- Workshops of the Computational Geometry Week 2015,
- Workshops of the Computational Geometry Week 2019 (**chair**),
- European Workshop of the Computational Geometry 2020.

## Organisation de conférences

— Organisation des journées de géométrie algorithmique : 1990 (Sophia-Antipolis), 1992 (Valberg), 1993 (Saint-Pierre), 1994 (Val d’Ajol), 1995 (Saint Malo) et 1996 (Le Bessat).

— Organisation des journées informatique et géométrie, 2007 (Sophia-Antipolis).

<http://www-sop.inria.fr/geometrica/events/jig2007/>.

— Organisation du “OrbiCG/Triangles Workshop on Computational Geometry”, 2010 (Sophia-Antipolis).

<http://www-sop.inria.fr/geometrica/collaborations/triangles/Workshop/>.

— Organisation du “Workshop on Geometric Computing”, 2013 (Heraklion, Grèce).

<http://www.acmac.uoc.gr/GC2013/>.

— Organisation du “Présage workshop on Computational Geometry and probability”, 2013 (Valberg).

<https://members.loria.fr/GMoroz/ANR-Presage/fr/reunions.html>.

— **Membre du comité d’organisation de ALGO 2013**

(ESA, WABI, IPEC, MASSIVE, ALGOSENSORS, ATMOS, WAOA). <http://algo2013.inria.fr/>.

— Organisation du “Workshop on Stochastic Geometry and Random Generation” dans le cadre de CG-Week 2015 (Heindoven). <https://members.loria.fr/Olivier.Devillers/wocg15/>.

— Organisation du “Mini-workshop on Routing in Triangulations”, 2019 (Nancy) <https://members.loria.fr/Olivier.Devillers/trip/workshop.html>.

## Animation de la communauté de géométrie algorithmique

- Lettre d’information de la géométrie algorithmique :  $\mathcal{G}\mathcal{E}\mathcal{D}\mathcal{E}\mathcal{O}\mathcal{N}$ , 34 numéros de 1991 à 2001 [304].

## Publications

La politique habituelle de signature en informatique théorique est l'ordre alphabétique. C'est le cas dans la plupart de mes publications avec quelques exceptions pour quelques articles publiés dans des conférences ou journaux relevant plus du domaine de l'informatique graphique.

Il est également d'usage en informatique théorique de publier un *extended abstract* dans une conférence puis une version avec les démonstrations complètes dans un journal.

Les journaux spécialisés en géométrie algorithmique sont *DCG*, *JoCG*, *CGTA* et *IJCGA*. Parmi ceux ci, *DCG* et *JoCG* ne publient que des articles de premier plan.

Articles de journaux 82 (*DCG* 8, *JoCG* 8, *IJCGA* 17, *CGTA* 15, *Algorithmica* 4, *SIAM Journal on Computing* 3, *TCS* 3, *ACM TOG (Siggraph)* 2, *Advances in Applied Probability* 1, *Electronic Communications in Probability* 1, . . .)

Pour les conférences, *SoCG* est la référence du domaine alors que *CCCG* est peu sélective. Les autres conférences relèvent de l'informatique théorique en général ou de domaines d'applications.

Conférences 92 (*SoCG* 20, *CCCG* 20, *SODA* 5, *ESA* 6, *Graph drawing* 3, *IEEE-Robotics* 2, *IEEE-Visualization* 2, *DGCI* 2, *CORESA* 2, *WADS* 3, *ISAAC* 3, *ALENEX* 2, *Meshing Roundtable* 1, . . .)

## Thèses, thèses encadrées

- 2015 [1] R. THOMASSE. – *Complexity analysis of random convex hulls*. – Thèse, Université Nice Sophia Antipolis, 2015. – [hal:tel-01252937](https://tel.archives-ouvertes.fr/tel-01252937).
- 2014 [2] R. HEMSLEY. – *Probabilistic methods for the analysis of algorithms on random tessellations*. – Thèse, Université de Nice - Sophia Antipolis, 2014. – [hal:tel-01099165](https://tel.archives-ouvertes.fr/tel-01099165).
- 2010 [3] M. M. DE CASTRO, PEDRO. – *Practical ways to accelerate Delaunay triangulations*. – Thèse, Université Nice Sophia Antipolis, 2010. – [hal:tel-00531765](https://tel.archives-ouvertes.fr/tel-00531765).
- 2008 [4] A. MEBARKI. – *Implementation of compact data structures for triangulations..* – Thèse, Université Nice Sophia Antipolis, 2008. – [hal:tel-00336178](https://tel.archives-ouvertes.fr/tel-00336178).
- 2006 [5] L. CASTELLI ALEARDI. – *Compact representations of geometric data structures*. – Thèse, École Polytechnique X, 2006. – [hal:tel-00336188](https://tel.archives-ouvertes.fr/tel-00336188).
- 2003 [6] P. GUIGUE. – *Geometric constructions with fixed precision*. – Thèse, Université Nice Sophia Antipolis, 2003. – [hal:tel-00471447](https://tel.archives-ouvertes.fr/tel-00471447).
- 2001 [7] P.-M. GANDOIN. – *Progressive and lossless geometric compression*. – Thèse, Université Nice Sophia Antipolis, 2001. – [hal:tel-00771344](https://tel.archives-ouvertes.fr/tel-00771344).
- 1996 [8] P. DESNOGUES. – *Triangulations and quadrics*. – Thèse, Université Nice Sophia Antipolis, 1996. – [hal:tel-00771335](https://tel.archives-ouvertes.fr/tel-00771335).
- 1993 [9] O. DEVILLERS. – *Randomization, spheres, and robot motion planning*. – Habilitation à diriger des recherches, Université Nice Sophia Antipolis, 1993. – <https://tel.archives-ouvertes.fr/tel-00338329>. – [hal:tel-00338329](https://tel.archives-ouvertes.fr/tel-00338329).
- 1988 [10] O. DEVILLERS. – *Optimizing ray-tracing*. – Theses, Université Paris Sud - Paris XI, 1988. – <https://tel.archives-ouvertes.fr/tel-00772857>. – [hal:tel-00772857](https://tel.archives-ouvertes.fr/tel-00772857).

## Proceedings édités, numéros spéciaux de journaux

- 2015 [11] S. W. CHENG, O. DEVILLERS. – *Journal of Computational Geometry; Special issue of Selected Papers from SoCG 2014*, 6, 2. Computational Geometry Lab, Carleton University, 2015. – <https://hal.inria.fr/hal-01154065>. – [hal:hal-01154065](https://hal.inria.fr/hal-01154065).
- [12] S. W. CHENG, O. DEVILLERS. – *Discrete and Computational Geometry; Special Issue : 30th Annual Symposium on Computational Geometry*, 53, 3. springer, 2015. – <https://hal.inria.fr/hal-01154063>. – [hal:hal-01154063](https://hal.inria.fr/hal-01154063).
- 2014 [13] S. W. CHENG, O. DEVILLERS (éd.). – *Proceedings of the 30th Annual Symposium on Computational Geometry*. – France, ACM, 2014, 571p. – <https://hal.inria.fr/hal-01018682>. – [hal:hal-01018682](https://hal.inria.fr/hal-01018682).



## Articles de revues internationales

2018

- [14] O. DEVILLERS, L. NOIZET. – «Walking in a Planar Poisson-Delaunay Triangulation : Shortcuts in the Voronoi Path». – *International Journal of Computational Geometry and Applications* 28, 3 (2018), pp. 255–269. – <https://hal.inria.fr/hal-01712628>. – hal:hal-01712628. – doi:10.1142/S0218195918500061.
- [15] N. CHENAVER, O. DEVILLERS. – «Stretch Factor in a Planar Poisson-Delaunay Triangulation with a Large Intensity». – *Advances in Applied Probability* 50, 1 (2018), pp. 35–56. – <https://hal.inria.fr/hal-01700778>. – hal:hal-01700778. – doi:10.1017/apr.2018.3.
- [16] D. BREMNER, O. DEVILLERS, M. GLISSE, S. LAZARD, G. LIOTTA, T. MCHEDLIDZE, G. MOROZ, S. WHITESIDES, S. WISMATH. – «Monotone Simultaneous Paths Embeddings in  $\mathbb{R}^d$ ». – *Discrete Mathematics and Theoretical Computer Science* 20, 1 (2018), pp. 1–11. – <https://hal.inria.fr/hal-01529154>. – hal:hal-01529154. – doi:10.23638/DMTCS-20-1-1.
- [17] P. MACHADO MANHÃES DE CASTRO, O. DEVILLERS. – «Expected Length of the Voronoi Path in a High Dimensional Poisson-Delaunay Triangulation». – *Discrete and Computational Geometry* 60, 1 (2018), pp. 200–219. – <https://hal.inria.fr/hal-01477030>. – hal:hal-01477030. – doi:10.1007/s00454-017-9866-y.
- [18] W. KUIJPER, V. ERMOLAEV, O. DEVILLERS. – «Celestial Walk : A Terminating, Memoryless Walk for Convex Subdivisions». – *Journal of Computer Graphics Techniques* 7, 3 (2018), pp. 29–49. – <https://hal.inria.fr/hal-01867771>. – hal:hal-01867771.
- [19] L. CASTELLI ALEARDI, O. DEVILLERS, E. FUSY. – «Canonical Ordering for Graphs on the Cylinder with Applications to Periodic Straight-line Drawings on the Flat Cylinder and Torus». – *Journal of Computational Geometry* 9, 1 (2018), pp. 391–429. – <https://hal.inria.fr/hal-01959590>. – hal:hal-01959590. – doi:10.20382/jocg.v9i1a14.
- [20] L. CASTELLI ALEARDI, O. DEVILLERS. – «Array-based Compact Data Structures for Triangulations : Practical Solutions with Theoretical Guarantees». – *Journal of Computational Geometry* 9, 1 (2018), pp. 247–289. – <https://hal.inria.fr/hal-01846652>. – hal:hal-01846652. – doi:10.20382/jocg.v9i1a8.

2017

- [21] O. DEVILLERS, M. KARAVELAS, M. TEILLAUD. – «Qualitative Symbolic Perturbation : Two Applications of a New Geometry-based Perturbation Framework». – *Journal of Computational Geometry* 8, 1 (2017), pp. 282–315. – <https://hal.inria.fr/hal-01586511>. – hal:hal-01586511. – doi:10.20382/jocg.v8i1a11.

2016

- [22] O. DEVILLERS, R. HEMSLEY. – «The worst visibility walk in a random Delaunay triangulation is  $O(\sqrt{n})$ ». – *Journal of Computational Geometry* 7, 1 (2016), pp. 332–359. – <https://hal.inria.fr/hal-01348831>. – hal:hal-01348831. – doi:10.20382/jocg.v7i1a16.
- [23] O. DEVILLERS, M. GLISSE, X. GOAOC, R. THOMASSE. – «Smoothed complexity of convex hulls by witnesses and collectors». – *Journal of Computational Geometry* 7, 2 (2016), pp. 101–144. – <https://hal.inria.fr/hal-01285120>. – hal:hal-01285120. – doi:10.20382/jocg.v7i2a6.
- [24] D. ATTALI, O. DEVILLERS, M. GLISSE, S. LAZARD. – «Recognizing Shrinkable Complexes Is NP-Complete». – *Journal of Computational Geometry* 7, 1 (2016), pp. 430–443. – <https://hal.inria.fr/hal-01384396>. – hal:hal-01384396. – doi:10.20382/jocg.v7i1a18.
- [25] N. BROUTIN, O. DEVILLERS, R. HEMSLEY. – «Efficiently navigating a random Delaunay triangulation». – *Random Structures and Algorithms* 49, 1 (2016), pp. 95–136. – <https://hal.inria.fr/hal-00940743>. – hal:hal-00940743. – doi:10.1002/rsa.20630.

2015

- [26] D. ATTALI, U. BAUER, O. DEVILLERS, M. GLISSE, A. LIEUTIER. – «Homological Reconstruction and Simplification in  $\mathbb{R}^3$ ». – *Computational Geometry* 48, 8 (2015), pp. 606–621. – <https://hal.archives-ouvertes.fr/hal-01132440>. – hal:hal-01132440. – doi:10.1016/j.comgeo.2014.08.010.

2014

- [27] M. BOGDANOV, O. DEVILLERS, M. TEILLAUD. – «Hyperbolic Delaunay Complexes and Voronoi Diagrams Made Practical». – *Journal of Computational Geometry* 5, 1 (2014), pp. 56–85. – <https://hal.inria.fr/hal-00961390>. – hal:hal-00961390. – doi:10.20382/jocg.v5i1a4.

2013

- [28] O. DEVILLERS, M. GLISSE, X. GOAOC, G. MOROZ, M. REITZNER. – «The monotonicity of  $f$ -vectors of random polytopes». – *Electronic Communications in Probability* 18, 23 (2013), pp. 1–8. – <https://hal.inria.fr/hal-00805690>. – hal:hal-00805690. – doi:10.1214/ECP.v18-2469.
- [29] P. MACHADO MANHÃES DE CASTRO, O. DEVILLERS. – «Practical Distribution-Sensitive Point Location in Triangulations». – *Computer Aided Geometric Design* 30 (2013), pp. 431–450. – <https://hal.inria.fr/hal-00803093>. – hal:hal-00803093. – doi:10.1016/j.cagd.2013.02.004.

- [30] D. CHEN, O. DEVILLERS, J. IACONO, S. LANGERMAN, P. MORIN. – «Oja centers and centers of gravity». – *Computational Geometry* 46, 2 (2013), pp. 140–147. – <https://hal.inria.fr/hal-00787177>. – hal:hal-00787177. – doi:10.1016/j.comgeo.2012.04.004.
- 2012 [31] N. AMENTA, D. ATTALI, O. DEVILLERS. – «A tight bound for the Delaunay triangulation of points on a polyhedron». – *Discrete and Computational Geometry* 48, 1 (2012), pp. 19–38. – <https://hal.archives-ouvertes.fr/hal-00784900>. – hal:hal-00784900. – doi:10.1007/s00454-012-9415-7.
- 2011 [32] O. DEVILLERS. – «Vertex Removal in Two Dimensional Delaunay Triangulation : Speed-up by Low Degrees Optimization». – *Computational Geometry* 44 (2011), pp. 169–177. – <https://hal.inria.fr/inria-00560379>. – hal:inria-00560379. – doi:10.1016/j.comgeo.2010.10.001.
- [33] O. DEVILLERS, M. TEILLAUD. – «Perturbations for Delaunay and weighted Delaunay 3D Triangulations». – *Computational Geometry* 44 (2011), pp. 160–168. – <https://hal.inria.fr/inria-00560388>. – hal:inria-00560388. – doi:10.1016/j.comgeo.2010.09.010.
- [34] P. MACHADO MANHÃES DE CASTRO, O. DEVILLERS. – «On the Size of Some Trees Embedded in  $\mathbb{R}^d$ ». – *Operations Research Letters* 39 (2011), pp. 44–48. – <https://hal.inria.fr/hal-00991081>. – hal:hal-00991081. – doi:10.1016/j.orl.2010.10.005.
- [35] O. DEVILLERS. – «Delaunay Triangulation of Imprecise Points, Preprocess and Actually Get a Fast Query Time». – *Journal of Computational Geometry* 2, 1 (2011), pp. 30–45. – <https://hal.inria.fr/inria-00595823>. – hal:inria-00595823. – doi:10.20382/jocg.v2i1a3.
- [36] L. CASTELLI ALEARDI, O. DEVILLERS, A. MEBARKI. – «Catalog Based Representation of 2D triangulations». – *International Journal of Computational Geometry and Applications* 21, 4 (2011), pp. 393–402. – <https://hal.inria.fr/inria-00560400>. – hal:inria-00560400. – doi:10.1142/S021819591100372X.
- 2010 [37] J. TOURNOIS, P. ALLIEZ, O. DEVILLERS. – «2D Centroidal Voronoi Tessellations with Constraints». – *Numerical Mathematics : Theory, Methods and Applications* 3, 2 (2010), pp. 212–222. – <https://hal.inria.fr/inria-00523812>. – hal:inria-00523812. – doi:10.4208/nmtma.2010.32s.6.
- 2009 [38] J. DEMOUTH, O. DEVILLERS, H. EVERETT, M. GLISSE, S. LAZARD, R. SEIDEL. – «On the Complexity of Umbra and Penumbra». – *Computational Geometry* 42, 8 (2009), pp. 758–771. – <https://hal.inria.fr/inria-00431418>. – hal:inria-00431418. – doi:10.1016/j.comgeo.2008.04.007.
- [39] J. DEMOUTH, O. DEVILLERS, M. GLISSE, X. GOAOC. – «Helly-type theorems for approximate covering». – *Discrete and Computational Geometry* 42, 3 (2009), pp. 379–398. – <https://hal.inria.fr/inria-00404171>. – hal:inria-00404171. – doi:10.1007/s00454-009-9167-1.
- [40] P. MACHADO MANHÃES DE CASTRO, J. TOURNOIS, P. ALLIEZ, O. DEVILLERS. – «Filtering Relocations on a Delaunay Triangulation». – *Computer Graphics Forum* (2009). – <https://hal.inria.fr/inria-00413344>. – hal:inria-00413344. – doi:10.1111/j.1467-8659.2009.01523.x.
- 2008 [41] L. CASTELLI ALEARDI, O. DEVILLERS, G. SCHAEFFER. – «Succinct representations of planar maps». – *Theoretical Computer Science* 408, 2-3 (2008), pp. 174–187. – <https://hal.inria.fr/inria-00337821>. – hal:inria-00337821. – doi:10.1016/j.tcs.2008.08.016.
- 2007 [42] O. DEVILLERS, V. DUJMOVIC, H. EVERETT, S. HORNUS, S. WHITESIDES, S. WISMATH. – «Maintaining Visibility Information of Planar Point Sets with a Moving Viewpoint». – *International Journal of Computational Geometry and Applications* 17, 4 (2007), pp. 297–304. – <https://hal.inria.fr/inria-00192927>. – hal:inria-00192927. – doi:10.1142/S0218195907002343.
- [43] H. BRÖNNIMANN, O. DEVILLERS, S. LAZARD, F. SOTTILE. – «Lines tangent to four triangles in three-dimensional space». – *Discrete and Computational Geometry* 37, 3 (2007), pp. 369–380. – <https://hal.inria.fr/inria-00000598>. – hal:inria-00000598. – doi:10.1007/s00454-006-1278-3.
- [44] H. BRÖNNIMANN, O. DEVILLERS, V. DUJMOVIC, H. EVERETT, M. GLISSE, X. GOAOC, S. LAZARD, H.-S. NA, S. WHITESIDES. – «Lines and free line segments Tangent to Arbitrary Three-dimensional Convex Polyhedra». – *SIAM Journal on Computing* 37, 2 (2007), pp. 522–551. – <https://hal.inria.fr/inria-00103916>. – hal:inria-00103916. – doi:10.1137/S0097539705447116.
- 2006 [45] O. DEVILLERS. – «Un joli algorithme géométrique et ses vilains problèmes numériques». – *Interstices* (2006), p. . – <https://hal.inria.fr/inria-00097857>. – hal:inria-00097857.
- [46] O. DEVILLERS, P. GUIGUE. – «Inner and Outer Rounding of Boolean Operations on Lattice Polygonal Regions». – *Computational Geometry* 33 (2006), pp. 3–17. – <https://arxiv.org/abs/cs.CG/0604059>. – <https://hal.inria.fr/inria-00001250>. – hal:inria-00001250. – doi:10.1016/j.comgeo.2004.08.005.

2005

- [47] O. DEVILLERS, H. EVERETT, S. LAZARD, M. PENTCHEVA, S. WISMATH. – «Drawing Kn in Three Dimensions with One Bend per Edge». – *Journal of Graph Algorithms and Applications (JGAA)* 10, 2 (2006), pp. 287–295. – <https://hal.inria.fr/inria-00103923>. – hal:inria-00103923.
- [48] P. ALLIEZ, É. COLIN DE VERDIÈRE, O. DEVILLERS, M. ISENBURG. – «Centroidal Voronoi diagrams for isotropic surface remeshing». – *Graphical Models* 67, 3 (2005), pp. 204–231. – <https://hal.inria.fr/hal-00787166>. – hal:hal-00787166. – doi:10.1016/j.gmod.2004.06.007.
- [49] O. DEVILLERS. – «The Number of Cylindrical Shells». – *Discrete and Computational Geometry* 30, 3 (2003), pp. 453–458. – <https://hal.inria.fr/inria-00090638>. – hal:inria-00090638. – doi:10.1007/s00454-003-2818-8.
- [50] O. DEVILLERS, V. DUJMOVIC, H. EVERETT, X. GOAOC, S. LAZARD, H.-S. NA, S. PETITJEAN. – «The expected number of 3D visibility events is linear». – *SIAM Journal on Computing* 32, 6 (2003), pp. 1586–1620. – <https://hal.inria.fr/inria-00099810>. – hal:inria-00099810. – doi:10.1137/S0097539702419662.
- [51] O. DEVILLERS, R. ESTKOWSKI, P.-M. GANDOIN, F. HURTADO, P. RAMOS, V. SACRISTÁN. – «Minimal set of constraints for 2D constrained Delaunay reconstruction». – *International Journal of Computational Geometry and Applications* 13, 5 (2003), pp. 391–398. – <https://hal.inria.fr/hal-00787186>. – hal:hal-00787186. – doi:10.1142/S0218195903001244.
- [52] P. GUIGUE, O. DEVILLERS. – «Fast and Robust Triangle-Triangle Overlap Test Using Orientation Predicates». – *Journal of graphics tools* 8, 1 (2003), pp. 39–52. – <https://hal.inria.fr/hal-00795042>. – hal:hal-00795042. – doi:10.1080/10867651.2003.10487580.
- [53] O. DEVILLERS, F. P. PREPARATA. – «Culling a Set of Points for Roundness or Cylindricity Evaluations». – *International Journal of Computational Geometry and Applications* 13 (2003), pp. 231–240. – <https://hal.inria.fr/inria-00412608>. – hal:inria-00412608. – doi:10.1142/S021819590300113X.
- [54] O. DEVILLERS, F. HURTADO, G. KÁROLYI, C. SEARA. – «Chromatic Variants of the Erdős-Szekeres Theorem on Points in Convex Position». – *Computational Geometry* 26 (2003), pp. 193–208. – <https://hal.inria.fr/inria-00412646>. – hal:inria-00412646. – doi:10.1016/S0925-7721(03)00013-0.
- [55] P. ALLIEZ, D. COHEN-STEINER, O. DEVILLERS, B. LÉVY, M. DESBRUN. – «Anisotropic Polygonal Remeshing». – *ACM Transactions on Graphics* 22, 3 (2003), pp. 485–493. – SIGGRAPH 2003 Session : Surfaces. Article dans revue scientifique avec comité de lecture. internationale. – <https://hal.inria.fr/inria-00099624>. – hal:inria-00099624. – doi:10.1145/1201775.882296.
- [56] O. DEVILLERS, S. PION, M. TEILLAUD. – «Walking in a Triangulation». – *International Journal of Foundations of Computer Science* 13 (2002), pp. 181–199. – <https://hal.inria.fr/inria-00102194>. – hal:inria-00102194. – doi:10.1142/S0129054102001047.
- [57] J.-D. BOISSONNAT, O. DEVILLERS, S. PION, M. TEILLAUD, M. YVINEC. – «Triangulations in CGAL». – *Computational Geometry* 22 (2002), pp. 5–19. – Special issue SoCG00. – <https://hal.inria.fr/inria-00167199>. – hal:inria-00167199. – doi:10.1016/S0925-7721(01)00054-2.
- [58] O. DEVILLERS. – «The Delaunay Hierarchy». – *International Journal of Foundations of Computer Science* 13 (2002), pp. 163–180. – <https://hal.inria.fr/inria-00166711>. – hal:inria-00166711. – doi:10.1142/S0129054102001035.
- [59] B. CHAZELLE, O. DEVILLERS, F. HURTADO, M. MORA, V. SACRISTAN, M. TEILLAUD. – «Splitting a Delaunay Triangulation in Linear Time». – *Algorithmica* 34, 1 (2002), pp. 39–46. – <https://hal.inria.fr/inria-00090664>. – hal:inria-00090664. – doi:10.1007/s00453-002-0939-8.
- [60] O. DEVILLERS, P.-M. GANDOIN. – «Rounding Voronoi Diagram». – *Theoretical Computer Science* 283, 1 (2002), pp. 203–221. – <https://hal.inria.fr/hal-00795053>. – hal:hal-00795053. – doi:10.1016/S0304-3975(01)00076-7.
- [61] P.-M. GANDOIN, O. DEVILLERS. – «Progressive Lossless Compression of Arbitrary Simplicial Complexes». – *ACM Transactions on Graphics* 21, Siggraph'2002 Conference proceedings (2002), pp. 372–379. – <https://hal.inria.fr/inria-00167216>. – hal:inria-00167216. – doi:10.1145/566654.566591.
- [62] O. DEVILLERS. – «On Deletion in Delaunay Triangulations». – *International Journal of Computational Geometry and Applications* 12 (2002), pp. 193–205. – <https://hal.inria.fr/inria-00167201>. – hal:inria-00167201. – doi:10.1142/S0218195902000815.
- [63] O. DEVILLERS, P. RAMOS. – «Computing Roundness is Easy if the Set is Almost Round». – *International Journal of Computational Geometry and Applications* 12, 3 (2002), pp. 229–248. – <https://hal.inria.fr/hal-00795064>. – hal:hal-00795064. – doi:10.1142/S0218195902000840.

- [64] O. DEVILLERS, B. MOURRAIN, F. P. PREPARATA, P. TREBUCHET. – «Circular Cylinders by Four or Five Points in Space». – *Discrete and Computational Geometry* 29, 1 (2002), pp. 83–104. – <https://hal.inria.fr/inria-00090648>. – hal:inria-00090648. – doi:10.1007/s00454-002-2811-7.
- [65] O. DEVILLERS, A. FRONVILLE, B. MOURRAIN, M. TEILLAUD. – «Algebraic methods and arithmetic filtering for exact predicates on circle arcs». – *Computational Geometry* 22 (2002), pp. 119–142. – <https://hal.inria.fr/inria-00166709>. – hal:inria-00166709. – doi:10.1016/S0925-7721(01)00050-5.
- 2001 [66] O. DEVILLERS, P. GUIGUE. – «The shuffling buffer». – *International Journal of Computational Geometry and Applications* 11 (2001), pp. 555–572. – <https://hal.inria.fr/inria-00412567>. – hal:inria-00412567. – doi:10.1142/S021819590100064X.
- [67] J.-D. BOISSONNAT, J. CZYZOWICZ, O. DEVILLERS, M. YVINEC. – «Circular Separability of Polygons». – *Algorithmica* 30, 1 (2001), pp. 67–82. – <https://hal.inria.fr/inria-00090667>. – hal:inria-00090667. – doi:10.1007/s004530010078.
- 2000 [68] P. ALLIEZ, O. DEVILLERS, J. SNOEYINK. – «Removing degeneracies by perturbing the problem or perturbing the world». – *Reliable Computing* (2000). – <https://hal.inria.fr/inria-00338566>. – hal:inria-00338566. – doi:10.1023/A:1009942427413.
- [69] J.-D. BOISSONNAT, O. DEVILLERS, S. LAZARD. – «Motion planning of legged robots». – *SIAM Journal on Computing* 30, 1 (2000), pp. 218–246. – Article dans revue scientifique avec comité de lecture. – <https://hal.inria.fr/inria-00099289>. – hal:inria-00099289. – doi:10.1137/S0097539797326289.
- [70] J.-D. BOISSONNAT, J. CZYZOWICZ, O. DEVILLERS, J. URRUTIA, M. YVINEC. – «Computing Largest Circles Separating Two Sets of Segments». – *International Journal of Computational Geometry and Applications* 10 (2000), pp. 41–54. – <https://hal.inria.fr/inria-00338701>. – hal:inria-00338701. – doi:10.1142/S0218195900000036.
- 1999 [71] O. DEVILLERS, M. J. KATZ. – «Optimal Line Bipartitions of Point Sets». – *International Journal of Computational Geometry and Applications* 9, 1 (1999), pp. 39–51. – <https://hal.inria.fr/hal-00795067>. – hal:hal-00795067. – doi:10.1142/S0218195999000042.
- [72] O. DEVILLERS, F. P. PREPARATA. – «Further Results on Arithmetic Filters for Geometric Predicates». – *Computational Geometry* 13 (1999), pp. 141–148. – <https://hal.inria.fr/inria-00168163>. – hal:inria-00168163. – doi:10.1016/S0925-7721(99)00011-5.
- [73] O. DEVILLERS, A. MUKHOPADHYAY. – «Finding an ordinary conic and an ordinary hyperplane». – *Nordic Journal of Computing* 6 (1999), pp. 462–468. – <https://hal.inria.fr/inria-00168174>. – hal:inria-00168174.
- [74] J.-D. BOISSONNAT, J. CZYZOWICZ, O. DEVILLERS, J.-M. ROBERT, M. YVINEC. – «Convex Tours of Bounded Curvature.». – *Computational Geometry* 13 (1999), pp. 149–160. – <https://hal.inria.fr/inria-00413181>. – hal:inria-00413181. – doi:10.1016/S0925-7721(99)00022-X.
- 1998 [75] O. DEVILLERS, M. GOLIN. – «Dog bites postman : point location in the moving Voronoi diagram and related problems». – *International Journal of Computational Geometry and Applications* 8, 3 (1998), pp. 321–342. – <https://hal.inria.fr/hal-00795074>. – hal:hal-00795074. – doi:10.1142/S0218195998000163.
- [76] M. D. BERG, O. DEVILLERS, M. V. KREVELD, O. SCHWARZKOPF, M. TEILLAUD. – «Computing the Maximum Overlap of Two Convex Polygons Under Translations.». – *Theory of Computing Systems* 31 (1998), pp. 613–628. – <https://hal.inria.fr/inria-00413175>. – hal:inria-00413175. – doi:10.1007/PL00005845.
- [77] O. DEVILLERS, G. LIOTTA, F. P. PREPARATA, R. TAMASSIA. – «Checking the convexity of polytopes and the planarity of subdivisions.». – *Computational Geometry* 11 (1998), pp. 187–208. – <https://hal.inria.fr/inria-00413179>. – hal:inria-00413179. – doi:10.1016/S0925-7721(98)00039-X.
- [78] O. DEVILLERS, F. P. PREPARATA. – «A probabilistic analysis of the power of arithmetic filters». – *Discrete and Computational Geometry* 20, 4 (1998), pp. 523–547. – <https://hal.inria.fr/inria-00090653>. – hal:inria-00090653. – doi:10.1007/PL00009400.
- 1997 [79] F. AVNAIM, J.-D. BOISSONNAT, O. DEVILLERS, F. P. PREPARATA, M. YVINEC. – «Evaluating signs of determinants using single-precision arithmeti». – *Algorithmica* 17, 2 (1997), pp. 111–132. – <http://www.springerlink.com/content/nlr883hde9w2av31/>. – <https://hal.inria.fr/inria-00090613>. – hal:inria-00090613. – doi:10.1007/BF02522822.
- [80] M. D. BERG, O. DEVILLERS, K. DOBRINDT, O. SCHWARZKOPF. – «Computing a single cell in the union of two simple polygons». – *Information Processing Letters* 63 (1997), pp. 215–219. – <https://hal.inria.fr/inria-00413170>. – hal:inria-00413170. – doi:10.1016/S0020-0190(97)00125-7.

- 1996 [81] O. DEVILLERS, A. FABRI. – «Scalable algorithms for bichromatic line segment intersection problems on coarse grained multicomputers». – *International Journal of Computational Geometry and Applications* 6, 4 (1996), pp. 487–506. – <https://hal.inria.fr/hal-00795079>. – hal:hal-00795079. – doi:10.1142/S0218195996000307.
- [82] O. DEVILLERS, M. GOLIN, K. KEDEM, S. SCHIRRA. – «Queries on Voronoi Diagrams of Moving Points». – *Computational Geometry* 6 (1996), pp. 315–327. – <https://hal.inria.fr/inria-00413168>. – hal:inria-00413168. – doi:10.1016/0925-7721(95)00053-4.
- [83] J.-D. BOISSONNAT, A. CEREZO, O. DEVILLERS, M. TEILLAUD. – «Output-sensitive construction of the Delaunay triangulation of points lying in two planes». – *International Journal of Computational Geometry and Applications* 6, 1 (1996), pp. 1–14. – <https://hal.inria.fr/hal-00795075>. – hal:hal-00795075. – doi:10.1142/S0218195996000022.
- [84] O. DEVILLERS. – «An Introduction to Randomization in Computational Geometry.». – *Theoretical Computer Science* 157 (1996), pp. 35–52. – <https://hal.inria.fr/inria-00167202>. – hal:inria-00167202. – doi:10.1016/0304-3975(95)00174-3.
- [85] J.-D. BOISSONNAT, A. CEREZO, O. DEVILLERS, J. DUQUESNE, M. YVINEC. – «An Algorithm for Constructing the Convex Hull of a Set of Spheres in Dimension  $d$ ». – *Computational Geometry* 6 (1996), pp. 123–130. – <https://hal.inria.fr/inria-00413159>. – hal:inria-00413159. – doi:10.1016/0925-7721(95)00024-0.
- 1995 [86] J.-D. BOISSONNAT, O. DEVILLERS, L. DONATI, F. P. PREPARATA. – «Motion planning of legged robots : the spider robot problem». – *International Journal of Computational Geometry and Applications* 5, 1 (1995), pp. 3–20. – <https://hal.inria.fr/hal-00795083>. – hal:hal-00795083. – doi:10.1142/S0218195995000027.
- [87] O. DEVILLERS, M. GOLIN. – «Incremental Algorithms for Finding the Convex Hulls of Circles and the Lower Envelopes of Parabolas». – *Information Processing Letters* 56, 3 (1995), pp. 157–164. – <https://hal.inria.fr/inria-00413163>. – hal:inria-00413163. – doi:10.1016/0020-0190(95)00132-V.
- 1994 [88] J.-D. BOISSONNAT, O. DEVILLERS, J. DUQUESNE, M. YVINEC. – «Computing Connolly surfaces». – *Journal of molecular graphics* 12, 1 (1994), pp. 61–62. – <https://hal.inria.fr/hal-00795091>. – hal:hal-00795091. – doi:10.1016/0263-7855(94)80033-2.
- 1993 [89] O. DEVILLERS. – «Simultaneous Containment of Several Polygons : Analysis of the Contact Configurations». – *International Journal of Computational Geometry and Applications* 3, 4 (1993), pp. 429–442. – <https://hal.inria.fr/inria-00167170>. – hal:inria-00167170. – doi:10.1142/S0218195993000270.
- [90] J.-D. BOISSONNAT, O. DEVILLERS, M. TEILLAUD. – «A semidynamic construction of higher-order Voronoi diagrams and its randomized analysis». – *Algorithmica* 9, 4 (1993), pp. 329–356. – <http://www.springerlink.com/content/g22m7463281647rl/>. – <https://hal.inria.fr/inria-00090668>. – hal:inria-00090668. – doi:10.1007/BF01228508.
- 1992 [91] O. DEVILLERS. – «Randomization Yields Simple  $O(n \log^* n)$  Algorithms for Difficult  $\Omega(n)$  Problems». – *International Journal of Computational Geometry and Applications* 2, 1 (1992), pp. 97–111. – <https://hal.inria.fr/inria-00167206>. – hal:inria-00167206. – doi:10.1142/S021819599200007X.
- [92] O. DEVILLERS, S. MEISER, M. TEILLAUD. – «Fully dynamic Delaunay triangulation in logarithmic expected time per operation». – *Computational Geometry* 2, 2 (1992), pp. 55–80. – <https://hal.inria.fr/inria-00090678>. – hal:inria-00090678. – doi:10.1016/0925-7721(92)90025-N.
- [93] O. DEVILLERS, M. TEILLAUD, M. YVINEC. – «Dynamic location in an arrangement of line segments in the plane». – *Algorithms Review* 2, 3 (1992), pp. 89–103. – <https://hal.inria.fr/inria-00413506>. – hal:inria-00413506.
- [94] J.-D. BOISSONNAT, O. DEVILLERS, R. SCHOTT, M. TEILLAUD, M. YVINEC. – «Applications of random sampling to on-line algorithms in computational geometry». – *Discrete and Computational Geometry* 8, 1 (1992), pp. 51–71. – <https://hal.inria.fr/inria-00090675>. – hal:inria-00090675. – doi:10.1007/BF02293035.
- 1991 [95] J.-D. BOISSONNAT, O. DEVILLERS, F. P. PREPARATA. – «Computing the Union of 3-Colored Triangles». – *International Journal of Computational Geometry and Applications* 1, 2 (1991), pp. 187–196. – <https://hal.inria.fr/inria-00167176>. – hal:inria-00167176. – doi:10.1142/S021819599100013X.

## Chapitres de livres

- 2015 [96] L. CASTELLI ALEARDI, O. DEVILLERS, J. ROSSIGNAC. – «Compact data structures for triangulations». – *Dans : Encyclopedia of Algorithms*. Springer, 2015. – <https://hal.inria.fr/hal-01168565>. – hal:hal-01168565. – doi:10.1007/978-3-642-27848-8\_589-1.



- 2014 [97] O. DEVILLERS. — «Delaunay triangulation and randomized constructions». — *Dans : Encyclopedia of Algorithms*. Springer, 2014. — <https://hal.inria.fr/hal-01168575>. — hal:hal-01168575. — doi:10.1007/978-3-642-27848-8\_711-1.

## Conférences internationales

- 2019 [98] J.-D. BOISSONNAT, O. DEVILLERS, K. DUTTA, M. GLISSE. — «Randomized incremental construction of Delaunay triangulations of nice point sets». — *Dans : Proceedings of the 27th Annual European Symposium on Algorithms*. — Munich, Germany, 2019. — <https://hal.inria.fr/hal-02185566>. — hal:hal-02185566. — doi:10.4230/LIPIcs.ESA.2019.20.
- [99] K. BUCHIN, P. M. M. DE CASTRO, O. DEVILLERS, M. KARAVELAS. — «Hardness results on Voronoi, Laguerre and Apollonius diagrams». — *Dans : CCCG 2019 - Canadian Conference on Computational Geometry*. — Edmonton, Canada, 2019. — <https://hal.inria.fr/hal-02186693>. — hal:hal-02186693.
- 2018 [100] O. DEVILLERS, S. LAZARD, W. LENHART. — «3D Snap Rounding». — *Dans : Proceedings of the 34th International Symposium on Computational Geometry*, pp. 30 :1 – 30 :14. — Budapest, Hungary, 2018. — <https://hal.inria.fr/hal-01727375>. — hal:hal-01727375. — doi:10.4230/LIPIcs.SoCG.2018.30.
- 2016 [101] O. DEVILLERS, M. KARAVELAS, M. TEILLAUD. — «Qualitative Symbolic Perturbation». — *Dans : Proceedings of the 32nd International Symposium on Computational Geometry*, pp. 33 :1 – 33 :15. — Boston, United States, 2016. — <https://hal.inria.fr/hal-01276444>. — hal:hal-01276444. — doi:10.4230/LIPIcs.SoCG.2016.33.
- [102] D. BREMNER, O. DEVILLERS, M. GLISSE, S. LAZARD, G. LIOTTA, T. MCHEDLIDZE, S. WHITESIDES, S. WISMATH. — «Monotone Simultaneous Paths Embeddings in  $\mathbb{R}^d$ ». — *Dans : 24th International Symposium on Graph Drawing & Network Visualization, Proceedings of 24th International Symposium on Graph Drawing & Network Visualization, 9801*, Springer. — Athens, Greece, 2016. <https://arxiv.org/abs/1608.08791>. — <https://hal.inria.fr/hal-01366148>. — hal:hal-01366148.
- 2015 [103] O. DEVILLERS, M. GLISSE, X. GOAOC, R. THOMASSE. — «On the smoothed complexity of convex hulls». — *Dans : Proceedings of the 31st International Symposium on Computational Geometry*, Lipics, pp. 224–238. — Eindhoven, Netherlands, 2015. — <https://hal.inria.fr/hal-01144473>. — hal:hal-01144473. — doi:10.4230/LIPIcs.SOCG.2015.224.
- 2014 [104] D. ATTALI, O. DEVILLERS, M. GLISSE, S. LAZARD. — «Recognizing shrinkable complexes is NP-complete». — *Dans : Proceedings of the 22nd European Symposium on Algorithms*, A. Schulz, D. Wagner (éd.), 8737, Springer, pp. 74–86. — Wroclaw, Poland, 2014. — <https://hal.inria.fr/hal-01015747>. — hal:hal-01015747. — doi:10.1007/978-3-662-44777-2\_7.
- [105] N. BROUTIN, O. DEVILLERS, R. HEMSLEY. — «Efficiently Navigating a Random Delaunay Triangulation». — *Dans : AofA 2014 - 25th International Conference on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms*. — Paris, France, 2014. — <https://hal.inria.fr/hal-01018174>. — hal:hal-01018174.
- 2013 [106] K. BUCHIN, O. DEVILLERS, W. MULZER, O. SCHRIJVERS, J. SHEWCHUK. — «Vertex Deletion for 3D Delaunay Triangulations». — *Dans : Proceedings of the 21st European Symposium on Algorithms, LNCS, 8125*, Springer, pp. 253–264. — Sophia Antipolis, France, 2013. — <https://hal.inria.fr/hal-00832992>. — hal:hal-00832992. — doi:10.1007/978-3-642-40450-4\_22.
- [107] D. ATTALI, U. BAUER, O. DEVILLERS, M. GLISSE, A. LIEUTIER. — «Homological Reconstruction and Simplification in  $\mathbb{R}^3$ ». — *Dans : Proceedings of the 29th Annual Symposium on Computational Geometry*, ACM, pp. 117–125. — Rio de Janeiro, Brazil, 2013. — <https://hal.inria.fr/hal-00833791>. — hal:hal-00833791. — doi:10.1145/2462356.2462373.
- [108] M. BOGDANOV, O. DEVILLERS, M. TEILLAUD. — «Complexity Analysis of Random Geometric Structures Made Simpler». — *Dans : Proceedings of the 29th Annual Symposium on Computational Geometry*, pp. 167–175. — Rio, Brazil, 2013. — <https://hal.inria.fr/hal-00833760>. — hal:hal-00833760. — doi:10.1145/2462356.2462362.
- [109] O. DEVILLERS, M. GLISSE, X. GOAOC. — «Complexity Analysis of Random Geometric Structures Made Simpler». — *Dans : 29th Annual Symposium on Computational Geometry*, pp. 167–175. — Rio, Brazil, 2013. — <https://hal.inria.fr/hal-00833774>. — hal:hal-00833774. — doi:10.1145/2462356.2462362.
- [110] L. CASTELLI ALEARDI, O. DEVILLERS, J. ROSSIGNAC. — «ESQ : Editable Squad Representation for Triangle Meshes». — *Dans : 25th SIBGRAPI Conference on Graphics, Patterns and Images, SIBGRAPI 2012, Proc. of 25th SIBGRAPI Conference on Graphics, Patterns and Images, SIBGRAPI 2012*, IEEE

- Computer Society, pp. 110–117. – Ouro Preto, Brazil, 2012. – <https://hal.inria.fr/hal-00793592>. – hal:hal-00793592. – doi:10.1109/SIBGRAPI.2012.24.
- [111] O. DEVILLERS. – «Delaunay triangulations, theory vs practice.». – *Dans : EuroCG, 28th European Workshop on Computational Geometry*. – Assisi, Italy, 2012. – <https://hal.inria.fr/hal-00850561>. – hal:hal-00850561.
- [112] L. CASTELLI ALEARDI, O. DEVILLERS, E. FUSY. – «Canonical Ordering for Triangulations on the Cylinder, with Applications to Periodic Straight-line Drawings». – *Dans : Graph Drawing - 20th International Symposium, GD 2012, Lecture Notes in Computer Science, 7704*, Springer, pp. 376–387. – Redmond, WA, United States, 2012. – <https://hal.inria.fr/hal-00793636>. – hal:hal-00793636. – doi:10.1007/978-3-642-36763-2\_34.
- [113] P. MACHADO MANHÃES DE CASTRO, O. DEVILLERS. – «Simple and Efficient Distribution-Sensitive Point Location in Triangulations». – *Dans : Proceedings of the 13th Workshop on Algorithm Engineering and Experiments*, SIAM, pp. 127–138. – San Francisco, United States, 2011. – <https://hal.inria.fr/hal-00850559>. – hal:hal-00850559.
- [114] M. BOGDANOV, O. DEVILLERS, M. TEILLAUD. – «Hyperbolic Delaunay triangulations and Voronoi diagrams made practical». – *Dans : XIV Spanish Meeting on Computational Geometry*,. – Alcala de Henares, Spain, 2011. Special edition for Ferran Hurtado birthday. – <https://hal.inria.fr/hal-00850586>. – hal:hal-00850586.
- [115] L. CASTELLI ALEARDI, O. DEVILLERS. – «Explicit array-based compact data structures for triangulations». – *Dans : 22nd International Symposium on Algorithms and Computation*, T. Asano, S. ichi Nakano, Y. Okamoto, O. Watanabe (éd.), LNCS, 7074, Springer-Verlag, pp. 312–322. – Yokohama, Japan, 2011. – <https://hal.inria.fr/hal-00678615>. – hal:hal-00678615.
- [116] L. CASTELLI ALEARDI, O. DEVILLERS. – «Explicit array-based compact data structures for planar and surface meshes». – *Dans : XIV Spanish Meeting on Computational Geometry*,. – Alcala de Henares, Spain, 2011. Special edition for Ferran Hurtado birthday. – <https://hal.inria.fr/hal-00850588>. – hal:hal-00850588.
- [117] O. DEVILLERS. – «Delaunay triangulation of imprecise points, preprocess and actually get a fast query time». – *Dans : XIV Spanish Meeting on Computational Geometry*,. – Alcala de Henares, Spain, 2011. Special edition for Ferran Hurtado birthday. – <https://hal.inria.fr/hal-00850583>. – hal:hal-00850583.
- [118] P. MACHADO MANHÃES DE CASTRO, O. DEVILLERS. – «A Pedagogic JavaScript Program for Point Location Strategies». – *Dans : 27th Annual Symposium on Computational Geometry (Video)*, ACM, pp. 295–296. – Paris, France, 2011. – <https://hal.inria.fr/hal-00850551>. – hal:hal-00850551. – doi:10.1145/1998196.1998244.
- [119] D. CHEN, O. DEVILLERS, J. IACONO, S. LANGERMAN, P. MORIN. – «Oja Medians and Centers of Gravity». – *Dans : 22th Canadian Conference on Computational Geometry*. – Winnipeg, Canada, 2010. – <https://hal.inria.fr/inria-00523684>. – hal:inria-00523684.
- [120] O. AICHHOLZER, F. AURENHAMMER, O. DEVILLERS, T. HACKL, M. TEILLAUD, B. VOGTENHUBER. – «Lower and upper bounds on the number of empty cylinders and ellipsoids». – *Dans : European Workshop on Computational Geometry*, pp. 139–142. – Bruxelles, Belgium, 2009. – <https://hal.inria.fr/inria-00412352>. – hal:inria-00412352.
- [121] J.-D. BOISSONNAT, O. DEVILLERS, S. HORNUS. – «Incremental construction of the Delaunay graph in medium dimension». – *Dans : Proceedings of the 25th Annual Symposium on Computational Geometry*, pp. 208–216. – Aarhus, Denmark, 2009. – <https://hal.inria.fr/inria-00412437>. – hal:inria-00412437. – doi:10.1145/1542362.1542403.
- [122] P. MACHADO MANHÃES DE CASTRO, O. DEVILLERS. – «Fast Delaunay Triangulation for Converging Point Relocation Sequences». – *Dans : European Workshop on Computational Geometry*. – Bruxelles, Belgium, 2009. – <https://hal.inria.fr/inria-00413351>. – hal:inria-00413351.
- [123] O. DEVILLERS, M. GLISSE, S. LAZARD. – «Predicates for line transversals to lines and line segments in three-dimensional space». – *Dans : Proceedings of the 24th Annual Symposium on Computational Geometry*, M. Teillaud (éd.), ACM, pp. 174–181. – College Park, Maryland, United States, 2008. – <https://hal.inria.fr/inria-00336256>. – hal:inria-00336256. – doi:10.1145/1377676.1377704.
- [124] J. DEMOUTH, O. DEVILLERS, M. GLISSE, X. GOAOC. – «Helly-type theorems for approximate covering». – *Dans : Proceedings of the 24th Annual Symposium on Computational Geometry*, ACM, pp. 120–128. – College Park, Maryland, United States, 2008. – <https://hal.inria.fr/inria-00331435>. – hal:inria-00331435.

2007

- [125] O. DEVILLERS, J. ERICKSON, X. GOAOC. – «Empty-ellipse graphs». – *Dans : 19th Annual ACM-SIAM Symposium on Discrete Algorithms (SODA'08)*, pp. 1249–1256. – San Francisco, United States, 2008. – <https://hal.inria.fr/inria-00176204>. – hal:inria-00176204.
- [126] J. TOURNOIS, P. ALLIEZ, O. DEVILLERS. – «Interleaving Delaunay Refinement and Optimization for 2D Triangle Mesh Generation». – *Dans : Proceedings of the 16th International Meshing Roundtable*, M. L. Brewer, D. Marcum (éd.), Springer, pp. 83–101. – Seattle, United States, 2007. – <https://hal.inria.fr/hal-01179018>. – hal:hal-01179018. – doi:10.1007/978-3-540-75103-8\_5.
- [127] N. AMENTA, D. ATTALI, O. DEVILLERS. – «Complexity of Delaunay Triangulation for Points on Lower-dimensional Polyhedra». – *Dans : Proceedings of the 18th ACM-SIAM Symposium on Discrete Algorithms*, pp. 1106–1113. – New Orleans, United States, 2007. Equipe GPIG de GIPSA-lab. – <https://hal.inria.fr/inria-00182835>. – hal:inria-00182835.

2006

- [128] J. DEMOUTH, O. DEVILLERS, H. EVERETT, M. GLISSE, S. LAZARD, R. SEIDEL. – «Between umbra and penumbra». – *Dans : Proceedings of the 23rd Annual Symposium on Computational Geometry, Proceedings of the twenty-third annual symposium on Computational geometry, Session 8A*, Hee-Kap Ahn, Otfried Cheong, and Kyung-Yong Chwa, ACM, pp. 265–274. – Gyeongju, South Korea, 2007. – <https://hal.inria.fr/inria-00187253>. – hal:inria-00187253. – doi:10.1145/1247069.1247117.
- [129] L. CASTELLI ALEARDI, O. DEVILLERS, G. SCHAEFFER. – «Optimal Succinct Representations of Planar Maps». – *Dans : Proceedings of the 22nd Annual Symposium on Computational Geometry*, ACM. – Sedona, Arizona, United States, 2006. – <https://hal.inria.fr/inria-00098669>. – hal:inria-00098669. – doi:10.1145/1137856.1137902.
- [130] O. DEVILLERS, A. MEBARKI, L. CASTELLI ALEARDI. – «2D Triangulation Representation Using Stable Catalogs». – *Dans : Proc. 18th Canadian Conference on Computational Geometry*. – Kingston, Canada, France, 2006. – <https://hal.inria.fr/inria-00090631>. – hal:inria-00090631.

2005

- [131] L. CASTELLI ALEARDI, O. DEVILLERS, G. SCHAEFFER. – «Succinct representation of triangulations with a boundary». – *Dans : 9th Workshop on Algorithms and Data Structures, Lecture Notes in Computer Science, 3608*, Springer, pp. 134–135. – Waterloo, Canada, 2005. – <https://hal.inria.fr/inria-00090707>. – hal:inria-00090707.
- [132] O. DEVILLERS, V. DUJMOVIC, H. EVERETT, S. HORNUS, S. WISMATH, S. WHITESIDES. – «Maintaining Visibility Information of Planar Point Sets with a Moving Viewpoint». – *Dans : 17th Canadian Conference on Computational Geometry - CCCG'2005*. – Windsor, Canada, 2005. – <https://hal.inria.fr/inria-00000569>. – hal:inria-00000569.
- [133] L. CASTELLI ALEARDI, O. DEVILLERS, G. SCHAEFFER. – «Dynamic updates of succinct triangulations». – *Dans : 18th Canadian Conference on Computational Geometry*. – Windsor, Canada, France, 2005. – <https://hal.inria.fr/inria-00001187>. – hal:inria-00001187.

2004

- [134] O. DEVILLERS, H. EVERETT, S. LAZARD, M. PENTCHEVA, S. WISMATH. – «Drawing  $K_n$  in Three Dimensions with One Bend per Edge». – *Dans : 13th International Symposium on Graph Drawing - GD'2005*. – University of Limerick, Ireland, 2005. – <https://hal.inria.fr/inria-00000374>. – hal:inria-00000374.
- [135] P. ESTALELLA, I. MARTIN, G. DRETTAKIS, D. TOST, O. DEVILLERS, F. CAZALS. – «Accurate Interactive Specular Reflections on Curved Objects». – *Dans : Vision Modeling and Visualization (VMV 2005)*, G. Greiner (éd.), Berlin : Akademische Verl.-Ges. Aka, 2005., p. 8. – Erlangen, Germany, 2005. – <https://hal.inria.fr/inria-00606757>. – hal:inria-00606757.
- [136] H. BRÖNNIMANN, O. DEVILLERS, V. DUJMOVIC, H. EVERETT, M. GLISSE, X. GOAOC, S. LAZARD, H.-S. NA, S. WHITESIDES. – «The Number of Lines Tangent to Arbitrary Convex Polyhedra in 3D». – *Dans : Proceedings of the 20th Annual Symposium on Computational Geometry*, ACM, pp. 46 – 55. – Brooklyn, NY, United States, 2004. Colloque avec actes et comité de lecture. internationale. – <https://hal.inria.fr/inria-00103995>. – hal:inria-00103995. – doi:10.1145/997817.997827.
- [137] H. BRÖNNIMANN, O. DEVILLERS, S. LAZARD, F. SOTTILE. – «On the number of line tangents to four triangles in three-dimensional space». – *Dans : 16th Canadian Conference on Computational Geometry - CCCG'04*, p. 4 p. – Montreal, Canada, 2004. Colloque avec actes et comité de lecture. internationale. – <https://hal.inria.fr/inria-00099873>. – hal:inria-00099873.



- [138] O. DEVILLERS, P. GUIGUE. – «Inner and outer rounding of set operations on lattice polygonal regions». – Dans : *Proceedings of the 20th Annual Symposium on Computational Geometry*, ACM, pp. 429–437. – Brooklyn, United States, 2004. – <https://hal.inria.fr/hal-01179036>. – hal:hal-01179036. – doi:10.1145/997817.997881.
- 2003 [139] M. TRENTINI, O. DEVILLERS, P.-M. GANDOIN. – «Transmission progressive de modèles triangulés sur le réseau». – Dans : *CORESA*. – Lyon, France, 2003. – <https://hal.inria.fr/hal-01117289>. – hal:hal-01117289.
- [140] O. DEVILLERS, M. TEILLAUD. – «Perturbations and Vertex Removal in a 3D Delaunay Triangulation». – Dans : *Proceedings of the 14th ACM-SIAM Symposium on Discrete Algorithms*, pp. 313–319. – Baltimore, MA, United States, 2003. – <https://hal.inria.fr/inria-00166710>. – hal:inria-00166710.
- [141] P. ALLIEZ, É. COLIN DE VERDIÈRE, O. DEVILLERS, M. ISENBURG. – «Isotropic Surface Remeshing». – Dans : *International Conference on Shape Modeling and applications*,. – Seoul, South Korea, 2003. – <https://hal.inria.fr/inria-00413144>. – hal:inria-00413144.
- [142] O. DEVILLERS, S. PION. – «Efficient Exact Geometric Predicates for Delaunay Triangulations». – Dans : *Proceedings of the 5th Workshop on Algorithm Engineering and Experiments*, pp. 37–44. – Baltimore, Maryland, United States, 2003. – <https://hal.inria.fr/inria-00344517>. – hal:inria-00344517.
- [143] P. ALLIEZ, O. DEVILLERS, M. ISENBURG, S. VALETTE. – «Compression de maillages, un état de l’art». – Dans : *CORESA*. – Lyon, France, 2003. – <https://hal.inria.fr/hal-01117287>. – hal:hal-01117287.
- 2002 [144] H. BRÖNNIMANN, O. DEVILLERS, V. DUJMOVIC, H. EVERETT, M. GLISSE, X. GOAOC, S. LAZARD, H.-S. NA, S. WHITESIDES. – «On the Number of Lines Tangent to Four Convex Polyhedra». – Dans : *14th Canadian Conference on Computational Geometry - CCCG’02*. – Lethbridge, Canada, 2002. Colloque avec actes sans comité de lecture. internationale. – <https://hal.inria.fr/inria-00099449>. – hal:inria-00099449.
- 2001 [145] O. DEVILLERS, S. PION, M. TEILLAUD. – «Walking in a Triangulation». – Dans : *Proceedings of the 17th Annual Symposium on Computational Geometry*, pp. 106–114. – Boston, United States, 2001. – <https://hal.inria.fr/inria-00344519>. – hal:inria-00344519. – doi:10.1145/378583.378643.
- [146] O. DEVILLERS, P. GUIGUE. – «The shuffling buffer». – Dans : *13th Canadian Conference on Computational Geometry*. – Waterloo, Canada, 2001. – <https://hal.inria.fr/hal-01179052>. – hal:hal-01179052.
- [147] B. CHAZELLE, O. DEVILLERS, F. HURTADO, M. MORA, V. SACRISTÁN, M. TEILLAUD. – «Splitting a Delaunay Triangulation in Linear Time». – Dans : *Proceedings of the 8th European Symposium on Algorithms, LNCS, 2161*, springer, pp. 312–320. – Aarhus, Denmark, 2001. – <https://hal.inria.fr/hal-01179401>. – hal:hal-01179401. – doi:10.1007/3-540-44676-1.26.
- [148] O. DEVILLERS, F. HURTADO, M. MORA, C. SEARA. – «Separating Several Point Sets in the Plane». – Dans : *13th Canadian Conference on Computational Geometry*. – Waterloo, Canada, 2001. – <https://hal.inria.fr/hal-01179059>. – hal:hal-01179059.
- 2000 [149] O. DEVILLERS, J.-D. BOISSONNAT, M. YVINEC, M. TEILLAUD. – «Triangulations in CGAL». – Dans : *Proceedings of the 16th Annual Symposium on Computational Geometry*, ACM, pp. 11–18. – Hong Kong, China, 2000. – <https://hal.inria.fr/hal-01179408>. – hal:hal-01179408. – doi:10.1145/336154.336165.
- [150] O. DEVILLERS, P.-M. GANDOIN. – «Geometric compression for interactive transmission». – Dans : *Proceedings of the conference on Visualization ’00*, IEEE, pp. 319–326. – Salt Lake City, United States, 2000. – <https://hal.inria.fr/hal-01179425>. – hal:hal-01179425. – doi:10.1109/VISUAL.2000.885711.
- [151] O. DEVILLERS, F. P. PREPARATA. – «Evaluating the cylindricity of a nominally cylindrical point set». – Dans : *Proceedings of the 11th ACM-SIAM Symposium on Discrete Algorithms*. – San Francisco, United States, 2000. – <https://hal.inria.fr/inria-00412600>. – hal:inria-00412600.
- [152] O. DEVILLERS, A. FRONVILLE, B. MOURRAIN, M. TEILLAUD. – «Algebraic methods and arithmetic filtering for exact predicates on circle arcs». – Dans : *Proceedings of the 16th Annual Symposium on Computational Geometry*, pp. 139–147. – Hong Kong, China, 2000. – <https://hal.inria.fr/hal-01179417>. – hal:hal-01179417. – doi:10.1145/336154.336194.
- 1999 [153] O. DEVILLERS, P.-M. GANDOIN. – «Rounding Voronoi Diagram». – Dans : *Discrete Geometry and Computational Imagery, LNCS, 1568*, springer, pp. 375–387. – Noisy le grand, France, 1999. – <https://hal.inria.fr/hal-01179442>. – hal:hal-01179442.
- [154] J.-D. BOISSONNAT, F. CAZALS, T. K. F. DA, O. DEVILLERS, S. PION, F. REBUFAT, M. TEILLAUD, M. YVINEC. – «Programming with CGAL : the example of triangulations». – Dans : *8th Annual Video Review of Computational Geometry, 15th ACM Symposium on Computational Geometry (SCG)*. – Miami Beach, Florida, United States, 1999. – <https://hal.inria.fr/inria-00348713>. – hal:inria-00348713.

- [155] O. DEVILLERS. — «On deletion in Delaunay triangulations». — *Dans : Proceedings of the 15th Annual Symposium on Computational Geometry*, ACM, pp. 181–189. — Miami, United States, 1999. — <https://hal.inria.fr/hal-01179435>. — hal:hal-01179435. — doi:10.1145/304893.304969.
- 1998 [156] P. ALLIEZ, O. DEVILLERS, J. SNOEYINK. — «Removing Degeneracies by Perturbing the Problem or the World». — *Dans : Canadian Conference on Computational Geometry*. — Montreal, Canada, 1998. — <https://hal.inria.fr/hal-01179696>. — hal:hal-01179696.
- [157] O. DEVILLERS. — «Improved incremental randomized Delaunay triangulation». — *Dans : Proceedings of the 14th Annual Symposium on Computational Geometry*, ACM, pp. 106–115. — Mineapolis, United States, 1998. — <https://hal.inria.fr/hal-01179446>. — hal:hal-01179446. — doi:10.1145/276884.276896.
- 1997 [158] O. DEVILLERS, G. LIOTTA, F. P. PREPARATA, R. TAMASSIA. — «Checking the convexity of polytopes and the planarity of subdivisions». — *Dans : Workshop Algorithms and Data Structures, LNCS, 1272*, springer, pp. 186–199. — Halifax, Canada, 1997. — <https://hal.inria.fr/hal-01179691>. — hal:hal-01179691.
- 1996 [159] L. TANCREDI, M. TEILLAUD, O. DEVILLERS. — «Symbolic Elimination for parallel manipulators». — *Dans : Communication at 4th International Symposium on Effective Methods in Algebraic Geometry (MEGA)..* — Eindhoven, Netherlands, 1996. — <https://hal.inria.fr/hal-01180168>. — hal:hal-01180168.
- [160] O. DEVILLERS, M. J. KATZ. — «Optimal Line Bipartitions of Point Sets». — *Dans : International Symposium on Algorithms and Computation, LNCS, 1178*, springer, pp. 45–54. — Osaka, Japan, 1996. — <https://hal.inria.fr/hal-01179453>. — hal:hal-01179453.
- [161] M. D. BERG, O. DEVILLERS, M. V. KREVELD, O. SCHWARZKOPF, M. TEILLAUD. — «Computing the Maximum Overlap of Two Convex Polygons Under Translations». — *Dans : International Symposium on Algorithms and Computation, LNCS, 1178*, springer, pp. 126–135. — Osaka, Japan, 1996. — <https://hal.inria.fr/hal-01179450>. — hal:hal-01179450.
- [162] J.-D. BOISSONNAT, J. CZYZOWICZ, O. DEVILLERS, J. URRUTIA, M. YVINEC. — «Computing Largest Circles Separating Two Sets of Segments». — *Dans : 8th Canadian Conference on Computational Geometry*. — Ottawa, Canada, 1996. — <https://hal.inria.fr/hal-01179145>. — hal:hal-01179145.
- [163] O. DEVILLERS. — «Computational geometry and discrete computations». — *Dans : Discrete Geometry for Computer Imagery, Lecture Notes in Computer Science, 1176*, Springer-Verlag. — Lyon, France, 1996. — <https://hal.inria.fr/inria-00338179>. — hal:inria-00338179.
- 1995 [164] F. AVNAIM, J.-D. BOISSONNAT, O. DEVILLERS, F. P. PREPARATA, M. YVINEC. — «Evaluation of a new method to compute signs of determinants». — *Dans : Proceedings of the 11th Annual Symposium on Computational Geometry*, ACM, pp. C16–C17. — Vancouver, Canada, 1995. — <https://hal.inria.fr/hal-01179456>. — hal:hal-01179456. — doi:10.1145/220279.220329.
- [165] J.-D. BOISSONNAT, J. CZYZOWICZ, O. DEVILLERS, M. YVINEC. — «Circular separability of polygon». — *Dans : Proceedings of the 6th ACM-SIAM Symposium on Discrete Algorithms*, SIAM, pp. 273–281. — , United States, 1995. — <https://hal.inria.fr/hal-01179468>. — hal:hal-01179468.
- [166] P. DESNOGUES, O. DEVILLERS. — «A Locally Optimal Triangulation of the Hyperbolic Paraboloid». — *Dans : Canadian Conference on Computational Geometry*, pp. 49–54. — Quebec, Canada, 1995. — <https://hal.inria.fr/inria-00413229>. — hal:inria-00413229.
- 1994 [167] O. DEVILLERS, K. KEDEM, M. GOLIN, S. SCHIRRA. — «Revenge of the Dog : Queries on Voronoi Diagrams of Moving Points.». — *Dans : Canadian Conference on Computational Geometry*, pp. 122–127. — Saskatoon, Canada, 1994. — <https://hal.inria.fr/hal-01179708>. — hal:hal-01179708.
- [168] J.-D. BOISSONNAT, O. DEVILLERS, S. LAZARD. — «Motion planning of legged robots». — *Dans : Workshop on Algorithmic foundations of robotics*. — San Francisco?, United States, 1994. — <https://hal.inria.fr/hal-01179461>. — hal:hal-01179461.
- [169] O. DEVILLERS, M. GOLIN. — «Incremental algorithms for finding the convex hulls of circles and the lower envelopes of parabolas». — *Dans : Canadian Conference on Computational Geometry*, pp. 153–158. — Saskatoon, Canada, 1994. — <https://hal.inria.fr/hal-01179705>. — hal:hal-01179705.
- [170] J.-D. BOISSONNAT, O. DEVILLERS, S. LAZARD. — «From spider robots to half disk robots». — *Dans : IEEE International Conference on Robotics and Automation*, IEEE, pp. 953–958. — San Diego, United States, 1994. — <https://hal.inria.fr/inria-00442776>. — hal:inria-00442776.

1993

- [171] J.-D. BOISSONNAT, J. CZYZOWICZ, O. DEVILLERS, J.-M. ROBERT, M. YVINEC. – «Convex Tours of Bounded Curvature». – *Dans : Proceedings of the 2nd European Symposium on Algorithms, LNCS, 855*, springer, pp. 254–265. – Utrecht, Netherlands, 1994. – <https://hal.inria.fr/hal-01179475>. – hal:hal-01179475. – doi:10.1007/BFb0049413.
- [172] O. DEVILLERS. – «An introduction to randomization in computational geometry». – *Dans : Workshop on Algorithmic Complexity of Algebraic and Geometric Models*. – , France, 1994. – <https://hal.inria.fr/hal-01179699>. – hal:hal-01179699.
- [173] O. DEVILLERS, A. FABRI. – «Scalable algorithms for bichromatic line segment intersection problems on coarse grained multicomputers». – *Dans : Workshop Algorithms and Data Structures, LNCS, 709*, springer, pp. 277–288. – Montreal, Canada, 1993. – <https://hal.inria.fr/hal-01179721>. – hal:hal-01179721.
- [174] O. DEVILLERS, M. GOLIN. – «Dog Bites Postman : Point Location in the Moving Voronoi Diagram and Related Problems». – *Dans : Proceedings of 1st European Symposium on Algorithms, LNCS, 294*, springer, pp. 133–144. – Nad Honef, Germany, 1993. – <https://hal.inria.fr/hal-01179730>. – hal:hal-01179730. – doi:10.1007/3-540-57273-2-50.
- [175] J.-D. BOISSONNAT, O. DEVILLERS, J. DUQUESNE, M. YVINEC. – «Computing the whole set of Connolly Surfaces». – *Dans : Annual Conference of the Molecular Graphics Society*. – , France, 1993. – <https://hal.inria.fr/hal-01179713>. – hal:hal-01179713.
- [176] O. DEVILLERS, S. MEISER, M. TEILLAUD. – «The space of spheres, a geometric tool to unify duality results on Voronoi diagrams». – *Dans : Canadian Conference on Computational Geometry*, pp. 263–268. – St. John’s, Canada, 1992. – <https://hal.inria.fr/hal-01180157>. – hal:hal-01180157.
- [177] J.-D. BOISSONNAT, O. DEVILLERS, L. DONATI, F. P. PREPARATA. – «Stable placements of spider robots». – *Dans : Proceedings of the 8th Annual Symposium on Computational Geometry, ACM*, pp. 242–250. – Berlin, Germany, 1992. – <https://hal.inria.fr/hal-01179904>. – hal:hal-01179904. – doi:10.1145/142675.142725.
- [178] J.-D. BOISSONNAT, O. DEVILLERS, L. DONATI, F. P. PREPARATA. – «Motion planning for a spider robot». – *Dans : IEEE International Conference on Robotics and Automation, IEEE*, pp. 2321–2326. – Nice, France, 1992. – <https://hal.inria.fr/hal-01179898>. – hal:hal-01179898.
- [179] O. DEVILLERS, N. MOUAWAD. – «Guarding Vertices versus Guarding Edges in a Simple Polygon». – *Dans : 4th Canadian Conference on Computational Geometry*, pp. 99–102. – St. John’s, Canada, 1992. – <https://hal.inria.fr/hal-01117277>. – hal:hal-01117277.
- [180] J.-D. BOISSONNAT, O. DEVILLERS, J. DUQUESNE. – «Computing Connolly Surfaces». – *Dans : IFIP Conference on Algorithms and efficient computation*. – ?, France, 1992. – <https://hal.inria.fr/hal-01180152>. – hal:hal-01180152.
- [181] J.-D. BOISSONNAT, A. CEREZO, O. DEVILLERS, J. DUQUESNE, M. YVINEC. – «An Algorithm for Constructing the Convex Hull of a Set of Spheres in Dimension  $d$ ». – *Dans : Canadian Conference on Computational Geometry*. – St. John’s, Canada, 1992. – <https://hal.inria.fr/hal-01179732>. – hal:hal-01179732.
- [182] O. DEVILLERS. – «Simple randomized  $O(n \log^* n)$  algorithms». – *Dans : Canadian Conference on Computational Geometry*, pp. 141–144. – Burnaby, Canada, 1991. – <https://hal.inria.fr/hal-01180162>. – hal:hal-01180162.
- [183] J.-D. BOISSONNAT, A. CEREZO, O. DEVILLERS, M. TEILLAUD. – «Output-sensitive construction of the 3-d Delaunay triangulation of constrained sets of points». – *Dans : Canadian Conference on Computational Geometry*, pp. 110–113. – Burnaby, Canada, 1991. – <https://hal.inria.fr/hal-01180159>. – hal:hal-01180159.
- [184] J.-D. BOISSONNAT, O. DEVILLERS, R. SCHOTT, M. TEILLAUD, M. YVINEC. – «On-line geometric algorithms with good expected behaviours». – *Dans : 3th World Congress on Computation and Applied Mathematics*, pp. 137–139. – , France, 1991. – <https://hal.inria.fr/hal-01180161>. – hal:hal-01180161.
- [185] O. DEVILLERS, S. MEISER, M. TEILLAUD. – «Fully dynamic Delaunay triangulation in logarithmic expected time per operation». – *Dans : Workshop Algorithms and Data Structures, LNCS, 519*, springer, pp. 42–53. – Ottawa, Canada, 1991. – <https://hal.inria.fr/hal-01180164>. – hal:hal-01180164.
- [186] J.-D. BOISSONNAT, O. DEVILLERS, F. P. PREPARATA. – «Computing the Union of 3-Colored Triangles». – *Dans : System Modelling and Optimization, Lecture Notes in Control and Information Science, 180*, IFIP, pp. 85–93. – Zurich, Switzerland, 1991. – <https://hal.inria.fr/hal-01180155>. – hal:hal-01180155.

1991

- 1990 [187] J.-D. BOISSONNAT, O. DEVILLERS, M. TEILLAUD. – «An on-line construction of higher-order Voronoi diagrams and its randomized analysis». – *Dans : Canadian Conference on Computational Geometry*, pp. 278–281. – Ottawa, Canada, 1990. – <https://hal.inria.fr/hal-01180166>. – hal:hal-01180166.
- 1989 [188] O. DEVILLERS. – «Tools to Study the Efficiency of Space Subdivision Structures for Ray Tracing». – *Dans : PIXIM*, pp. 467–481. – Paris, France, 1989. – <https://hal.inria.fr/hal-01180228>. – hal:hal-01180228.
- [189] O. DEVILLERS. – «The Macro-Regions, an Efficient Space Subdivision Structure for Ray Tracing». – *Dans : Eurographics*, pp. 27–38. – Hambourg, Germany, 1989. – <https://hal.inria.fr/hal-01180225>. – hal:hal-01180225.

## Preprints

- 2019 [190] J.-D. BOISSONNAT, O. DEVILLERS, K. DUTTA, M. GLISSE. – «Randomized incremental construction of Delaunay triangulations of nice point sets». – working paper or preprint, 2019. – <https://hal.inria.fr/hal-01950119>. – hal:hal-01950119.
- 2018 [191] O. DEVILLERS, P. DUCHON, M. GLISSE, X. GOAOC. – «On Order Types of Random Point Sets». – <https://arxiv.org/abs/1812.08525> - working paper or preprint, 2018. – <https://hal.inria.fr/hal-01962093>. – hal:hal-01962093.
- [192] V. DESPRÉ, O. DEVILLERS, H. PARLIER, J.-M. SCHLENKER. – «Delaunay Triangulations of Points on Circles». – <https://arxiv.org/abs/1803.11436> - working paper or preprint, 2018. – <https://hal.inria.fr/hal-01780607>. – hal:hal-01780607.
- 2017 [193] J.-D. BOISSONNAT, O. DEVILLERS, K. DUTTA, M. GLISSE. – «Delaunay triangulation of a random sample of a good sample has linear size ». – working paper or preprint, 2017. – <https://hal.inria.fr/hal-01673170>. – hal:hal-01673170.
- [194] L. CASTELLI ALEARDI, O. DEVILLERS, E. FUSY. – «Canonical ordering for graphs on the cylinder, with applications to periodic straight-line drawings on the flat cylinder and torus». – <https://arxiv.org/abs/1206.1919> - 37 pages, 2017. – <https://hal.inria.fr/hal-01646724>. – hal:hal-01646724.

## Rapports de recherche

- 2018 [195] O. DEVILLERS, C. DUMÉNIL. – «A Poisson sample of a smooth surface is a good sample». – *Research Report RR-9239*, INRIA Nancy, 2018. – <https://hal.inria.fr/hal-01962631>. – hal:hal-01962631.
- [196] O. DEVILLERS, S. LAZARD, W. LENHART. – «3D Snap Rounding». – *Research Report RR-9149*, Inria Nancy - Grand Est, 2018. – <https://hal.inria.fr/hal-01698928>. – hal:hal-01698928.
- 2017 [197] L. CASTELLI ALEARDI, O. DEVILLERS. – «Explicit array-based compact data structures for triangulations : practical solutions with theoretical guarantees». – *Research Report RR-7736*, INRIA, 2017. – <https://hal.inria.fr/inria-00623762>. – hal:inria-00623762.
- [198] O. DEVILLERS, M. GLISSE. – «Delaunay triangulation of a random sample of a good sample has linear size». – *Research Report RR-9082*, Inria Saclay Ile de France; Inria Nancy - Grand Est, 2017. – <https://hal.inria.fr/hal-01568030>. – hal:hal-01568030.
- [199] W. KUIJPER, V. ERMOLAEV, O. DEVILLERS. – «Celestial Walk : A Terminating Oblivious Walk for Convex Subdivisions». – *Research Report RR-9099*, INRIA Nancy, 2017. – <https://arxiv.org/abs/1710.01620>. – <https://hal.inria.fr/hal-01610205>. – hal:hal-01610205.
- 2016 [200] O. DEVILLERS, L. NOIZET. – «Walking in a Planar Poisson-Delaunay Triangulation : Shortcuts in the Voronoi Path». – *Research Report RR-8946*, INRIA Nancy, 2016. – <https://hal.inria.fr/hal-01353585>. – hal:hal-01353585.
- [201] N. CHENAVIER, O. DEVILLERS. – «Stretch Factor of Long Paths in a planar Poisson-Delaunay Triangulation». – *Research Report RR-8935*, Inria, 2016. – <https://arxiv.org/abs/1607.05770>. – <https://hal.inria.fr/hal-01346203>. – hal:hal-01346203.
- [202] P. MACHADO MANHÃES DE CASTRO, O. DEVILLERS. – «Expected Length of the Voronoi Path in a High Dimensional Poisson-Delaunay Triangulation». – *Research Report RR-8947*, Inria, 2016. – <https://hal.inria.fr/hal-01353735>. – hal:hal-01353735.
- 2015 [203] O. DEVILLERS, R. HEMSLEY. – «The worst visibility walk in a random Delaunay triangulation is  $O(\sqrt{n})$ ». – *Research Report RR-8792*, INRIA, 2015. – <https://hal.inria.fr/hal-01216212>. – hal:hal-01216212.

- [204] O. DEVILLERS, M. GLISSE, X. GOAOC, R. THOMASSE. – «Smoothed complexity of convex hulls by witnesses and collectors». – *Research Report 8787*, INRIA, 2015. – <https://hal.inria.fr/hal-01214021>. – hal:hal-01214021.
- [205] O. DEVILLERS, M. KARAVELAS, M. TEILLAUD. – «Qualitative Symbolic Perturbation : a new geometry-based perturbation framework». – *Research Report RR-8153*, INRIA, 2015. – <https://hal.inria.fr/hal-00758631>. – hal:hal-00758631.
- 2014 [206] O. DEVILLERS, P. DUCHON, R. THOMASSE. – «A generator of random convex polygons in a disc». – *Research Report RR-8467*, INRIA, 2014. – <https://hal.inria.fr/hal-00943409>. – hal:hal-00943409.
- 2013 [207] O. DEVILLERS, M. GLISSE, R. THOMASSE. – «A convex body with chaotic random convex hull». – *Research Report RR-8437*, INRIA, 2013. – <https://hal.inria.fr/hal-00922515>. – hal:hal-00922515.
- 2012 [208] O. DEVILLERS, M. GLISSE, X. GOAOC, G. MOROZ, M. REITZNER. – «The monotonicity of f-vectors of random polytopes». – *Research Report RR-8154*, INRIA, 2012. – <https://arxiv.org/abs/1211.7020>. – <https://hal.inria.fr/hal-00758686>. – hal:hal-00758686.
- [209] M. BOGDANOV, O. DEVILLERS, M. TEILLAUD. – «Hyperbolic Delaunay complexes and Voronoi diagrams made practical». – *Research Report RR-8146*, INRIA, 2012. – <https://hal.inria.fr/hal-00756522>. – hal:hal-00756522.
- [210] D. ATTALI, U. BAUER, O. DEVILLERS, M. GLISSE, A. LIEUTIER. – «Homological reconstruction and simplification in  $\mathbb{R}^3$ ». – *Research Report RR-8169*, INRIA, 2012. – <https://hal.inria.fr/hal-00761208>. – hal:hal-00761208.
- [211] L. CASTELLI ALEARDI, O. DEVILLERS, J. ROSSIGNAC. – «ESQ : Editable Squad representation for triangle meshes». – *Research Report RR-8066*, INRIA, 2012. – <https://hal.inria.fr/hal-00731322>. – hal:hal-00731322.
- [212] O. DEVILLERS, M. GLISSE, X. GOAOC. – «Complexity analysis of random geometric structures made simpler». – *Research Report RR-8168*, INRIA, 2012. – <https://hal.inria.fr/hal-00761171>. – hal:hal-00761171.
- [213] L. CASTELLI ALEARDI, O. DEVILLERS, E. FUSY. – «Canonical ordering for triangulations on the cylinder, with applications to periodic straight-line drawings». – *Research Report RR-7989*, INRIA, 2012. – <https://hal.inria.fr/hal-00705181>. – hal:hal-00705181.
- [214] N. BROUTIN, O. DEVILLERS, R. HEMSLEY. – «A cone can help you find your way in a Poisson Delaunay triangulation». – *Research Report RR-8194*, INRIA, 2012. – <https://hal.inria.fr/hal-00769529>. – hal:hal-00769529.
- 2010 [215] P. MACHADO MANHÃES DE CASTRO, O. DEVILLERS. – «Walking Faster in a Triangulation». – *Research Report RR-7322*, Inria, 2010. – <https://hal.inria.fr/inria-00493046>. – hal:inria-00493046.
- [216] P. MACHADO MANHÃES DE CASTRO, O. DEVILLERS. – «On the Size of Some Trees Embedded in  $\mathbb{R}^d$ ». – *Research Report RR-7179*, INRIA, 2010. – <https://hal.inria.fr/inria-00448335>. – hal:inria-00448335.
- [217] O. DEVILLERS. – «Delaunay Triangulation of Imprecise Points, Preprocess and Actually Get a Fast Query Time». – *Research Report RR-7299*, INRIA, 2010. – <https://hal.inria.fr/inria-00485915>. – hal:inria-00485915.
- 2009 [218] O. DEVILLERS. – «Vertex Removal in Two Dimensional Delaunay Triangulation : Asymptotic Complexity is Pointless». – *Research Report RR-7104*, INRIA, 2009. – <https://hal.inria.fr/inria-00433107>. – hal:inria-00433107.
- [219] D. ATTALI, O. DEVILLERS, X. GOAOC. – «The Effect of Noise on the Number of Extreme Points». – *Research Report RR-7134*, INRIA, 2009. – <https://hal.inria.fr/inria-00438409>. – hal:inria-00438409.
- [220] P. M. M. DE CASTRO, O. DEVILLERS. – «Self-Adapting Point Location». – *Research Report RR-7132*, INRIA, 2009. – <https://hal.inria.fr/inria-00438486>. – hal:inria-00438486.
- 2008 [221] O. DEVILLERS, P. MACHADO MANHÃES DE CASTRO. – «State of the Art : Updating Delaunay Triangulations for Moving Points». – *Research Report RR-6665*, INRIA, 2008. – <https://hal.inria.fr/inria-00325816>. – hal:inria-00325816.
- [222] O. DEVILLERS. – «Géométrie algorithmique et réseaux». – *Research Report RR-6514*, INRIA, 2008. – <https://hal.inria.fr/inria-00275272>. – hal:inria-00275272.
- [223] P. MACHADO MANHÃES DE CASTRO, O. DEVILLERS. – «Delaunay Triangulations for Moving Points». – *Research Report RR-6750*, INRIA, 2008. – <https://hal.inria.fr/inria-00344053>. – hal:inria-00344053.
- [224] O. AICHHOLZER, O. DEVILLERS, F. AURENHAMMER, T. HACKL, M. TEILLAUD, B. VOGTENHUBER. – «Counting Quadrics and Delaunay Triangulations and a new Convex Hull Theorem». – *Research Report RR-6748*, INRIA, 2008. – <https://hal.inria.fr/inria-00343651>. – hal:inria-00343651.



- [225] N. AMENTA, D. ATTALI, O. DEVILLERS. – «A Tight Bound for the Delaunay Triangulation of Points on a Polyhedron». – *Research Report RR-6522*, -; INRIA, 2008. – <https://hal.inria.fr/inria-00277899>. – hal:inria-00277899.
- 2007 [226] O. DEVILLERS, X. GOAOC. – «Random sampling of a cylinder yields a not so nasty Delaunay triangulation». – *Research Report RR-6323*, INRIA, 2007. – <https://hal.inria.fr/inria-00179313>. – hal:inria-00179313.
- [227] J. DEMOUTH, O. DEVILLERS, H. EVERETT, M. GLISSE, S. LAZARD, R. SEIDEL. – «On the Complexity of Umbra and Penumbra». – *Research Report RR-6347*, INRIA, 2007. – <https://hal.inria.fr/inria-00186262>. – hal:inria-00186262.
- [228] J. DEMOUTH, O. DEVILLERS, M. GLISSE, X. GOAOC. – «Helly-type theorems for approximate covering». – *Research Report RR-6342*, INRIA, 2007. – <https://hal.inria.fr/inria-00179277>. – hal:inria-00179277.
- 2006 [229] O. DEVILLERS, M. TEILLAUD. – «Perturbations and Vertex Removal in Delaunay and Regular 3D Triangulations». – *Research Report RR-5968*, INRIA, 2006. – <https://hal.inria.fr/inria-00090522>. – hal:inria-00090522.
- [230] L. CASTELLI ALEARDI, O. DEVILLERS, G. SCHAEFFER. – «Optimal succinct representation of planar maps». – *Research Report RR-5803*, INRIA, 2006. – <https://hal.inria.fr/inria-00070221>. – hal:inria-00070221.
- [231] A. MEBARKI, P. ALLIEZ, O. DEVILLERS. – «Farthest Point Seeding for Placement of Streamlines». – *Research Report RR-5524*, INRIA, 2006. – <https://hal.inria.fr/inria-00070483>. – hal:inria-00070483.
- [232] L. CASTELLI ALEARDI, O. DEVILLERS, G. SCHAEFFER. – «Dynamic updates of succinct triangulations». – *Research Report RR-5709*, INRIA, 2006. – <https://hal.inria.fr/inria-00070308>. – hal:inria-00070308.
- [233] N. AMENTA, D. ATTALI, O. DEVILLERS. – «Complexity of Delaunay triangulation for points on lower-dimensional polyhedra». – *Research Report RR-5986*, INRIA, 2006. – This research was initiated at the McGill-INRIA Workshop on Computational Geometry in Computer Graphics, February 2006, co-organized by H. Everett, S. Lazard, and S. Whitesides, and held at the Bellairs Research Institute of McGill University. – <https://hal.inria.fr/inria-00098300>. – hal:inria-00098300.
- [234] L. CASTELLI ALEARDI, O. DEVILLERS, G. SCHAEFFER. – «Compact representation of triangulations». – *Research Report RR-5433*, INRIA, 2006. – <https://hal.inria.fr/inria-00070574>. – hal:inria-00070574.
- 2005 [235] H. BRÖNNIMANN, O. DEVILLERS, V. DUJMOVIC, H. EVERETT, M. GLISSE, X. GOAOC, S. LAZARD, H.-S. NA, S. WHITESIDES. – «On the Number of Maximal Free Line Segments Tangent to Arbitrary Three-dimensional Convex Polyhedra». – *Research Report RR-5671*, INRIA, 2005. – <https://hal.inria.fr/inria-00071226>. – hal:inria-00071226.
- [236] O. DEVILLERS, V. DUJMOVIC, H. EVERETT, S. HORNUS, S. WHITESIDES, S. WISMATH. – «Maintaining Visibility Information of Planar Point Sets with a Moving Viewpoint». – *Research Report RR-5742*, INRIA, 2005. – Projet VEGAS. – <https://hal.inria.fr/inria-00077116>. – hal:inria-00077116.
- [237] H. BRÖNNIMANN, O. DEVILLERS, S. LAZARD, F. SOTTILE. – «Lines tangent to four triangles in three-dimensional space». – *Research Report RR-5693*, INRIA, 2005. – <https://hal.inria.fr/inria-00071223>. – hal:inria-00071223.
- [238] O. DEVILLERS, H. EVERETT, S. LAZARD, M. PENTCHEVA, S. WISMATH. – «Drawing  $K_n$  in Three Dimensions with One Bend per Edge». – *Research Report RR-5708*, INRIA, 2005. – <https://hal.inria.fr/inria-00071219>. – hal:inria-00071219.
- 2004 [239] F. CAYRE, O. DEVILLERS, F. SCHMITT, H. MAÎTRE. – «Watermarking 3D triangle meshes for authentication and integrity». – *Research Report RR-5223*, INRIA, 2004. – <https://hal.inria.fr/inria-00071257>. – hal:inria-00071257.
- [240] L. CASTELLI ALEARDI, O. DEVILLERS. – «Canonical Triangulation of a Graph, with a Coding Application». – *Rapport RR-5231*, INRIA, 2004. – <https://hal.inria.fr/inria-00070765>. – hal:inria-00070765.
- 2003 [241] O. DEVILLERS, P. GUIGUE. – «Inner and Outer Rounding of Set Operations on Lattice Polygonal Regions». – *Rapport RR-5070*, INRIA, 2003. – <https://hal.inria.fr/inria-00071513>. – hal:inria-00071513.
- [242] P. ALLIEZ, D. COHEN-STEINER, O. DEVILLERS, B. LÉVY, M. DESBRUN. – «Anisotropic Polygonal Remeshing». – *Research Report RR-4808*, INRIA, 2003. – <https://hal.inria.fr/inria-00071778>. – hal:inria-00071778.
- 2002 [243] O. DEVILLERS, V. DUJMOVIC, H. EVERETT, X. GOAOC, S. LAZARD, H.-S. NA, S. PETITJEAN. – «The expected number of 3D visibility events is linear». – *Research Report RR-4671*, INRIA, 2002. – <https://hal.inria.fr/inria-00071914>. – hal:inria-00071914.

2001

- [244] O. DEVILLERS, M. TEILLAUD. – «Perturbations and Vertex Removal in a 3D Delaunay Triangulation». – *Rapport RR-4624*, INRIA, 2002. – <https://hal.inria.fr/inria-00071961>. – hal:inria-00071961.
- [245] P. ALLIEZ, É. COLIN DE VERDIÈRE, O. DEVILLERS, M. ISENBURG. – «Isotropic Surface Remeshing». – *Rapport RR-4594*, INRIA, 2002. – <https://hal.inria.fr/inria-00071991>. – hal:inria-00071991.
- [246] O. DEVILLERS, P. GUIGUE. – «Finite Precision Elementary Geometric Constructions». – *Rapport RR-4559*, INRIA, 2002. – <https://hal.inria.fr/inria-00072029>. – hal:inria-00072029.
- [247] O. DEVILLERS, P. GUIGUE. – «Faster Triangle-Triangle Intersection Tests». – *Rapport RR-4488*, INRIA, 2002. – <https://hal.inria.fr/inria-00072100>. – hal:inria-00072100.
- [248] O. DEVILLERS, S. PION. – «Efficient Exact Geometric Predicates for Delaunay Triangulations». – *Rapport RR-4351*, INRIA, 2002. – <https://hal.inria.fr/inria-00072237>. – hal:inria-00072237.
- [249] O. DEVILLERS, F. HURTADO, C. SEARA. – «Chromatic Variants of the Erdős-Szekeres Theorem on Points in Convex Position». – *Rapport RR-4352*, INRIA, 2002. – <https://hal.inria.fr/inria-00072236>. – hal:inria-00072236.
- [250] O. DEVILLERS, S. PION, M. TEILLAUD. – «Walking in a triangulation». – *Rapport RR-4120*, INRIA, 2001. – <https://hal.inria.fr/inria-00072509>. – hal:inria-00072509.
- [251] B. CHAZELLE, O. DEVILLERS, F. HURTADO, M. MORA, V. SACRISTÁN, M. TEILLAUD. – «Splitting a Delaunay Triangulation in Linear Time». – *Rapport RR-4160*, INRIA, 2001. – <https://hal.inria.fr/inria-00072462>. – hal:inria-00072462.
- [252] O. DEVILLERS. – «On the Number of Cylindrical Shells». – *Rapport RR-4234*, INRIA, 2001. – <https://hal.inria.fr/inria-00072353>. – hal:inria-00072353.
- [253] O. DEVILLERS, B. MOURRAIN, F. P. PREPARATA, P. TREBUCHET. – «On circular Cylinders by Four or Five Points in Space». – *Rapport RR-4195*, INRIA, 2001. – <https://hal.inria.fr/inria-00072427>. – hal:inria-00072427.
- [254] O. DEVILLERS, R. ESTKOWSKI, P.-M. GANDOIN, F. HURTADO, P. RAMOS, V. SACRISTÁN. – «Minimal Set of Constraints for 2D Constrained Delaunay Reconstruction». – *Rapport RR-4119*, INRIA, 2001. – <https://hal.inria.fr/inria-00072510>. – hal:inria-00072510.
- [255] O. DEVILLERS, F. P. PREPARATA. – «Culling a Set of Points for Roundness or Cylindricity Evaluations». – *Rapport RR-4159*, INRIA, 2001. – <https://hal.inria.fr/inria-00072463>. – hal:inria-00072463.
- [256] O. DEVILLERS, P.-M. GANDOIN. – «Compression interactive de maillages triangulaires arbitraires». – *Rapport RR-4158*, INRIA, 2001. – <https://hal.inria.fr/inria-00072464>. – hal:inria-00072464.
- [257] O. DEVILLERS, P. GUIGUE. – «Le tampon mélangeur». – *Research Report RR-3988*, INRIA, 2000. – <https://hal.inria.fr/inria-00072658>. – hal:inria-00072658.
- [258] O. DEVILLERS, P.-M. GANDOIN. – «Geometric Compression for Interactive Transmission». – *Research Report RR-3910*, INRIA, 2000. – <https://hal.inria.fr/inria-00072743>. – hal:inria-00072743.
- [259] H. BRÖNNIMANN, O. DEVILLERS. – «The union of Unit Balls has Quadratic Complexity, even if They all Contain the Origin». – *Rapport RR-3758*, INRIA, 1999. – <https://hal.inria.fr/inria-00072904>. – hal:inria-00072904.
- [260] O. DEVILLERS, F. P. PREPARATA. – «Evaluating the Cylindricity of a Nominally Cylindrical Point Set (Draft)». – *Rapport RR-3747*, INRIA, 1999. – <https://hal.inria.fr/inria-00072915>. – hal:inria-00072915.
- [261] O. DEVILLERS, P.-M. GANDOIN. – «Compression géométrique pour une transmission progressive». – *Rapport RR-3766*, INRIA, 1999. – <https://hal.inria.fr/inria-00072896>. – hal:inria-00072896.
- [262] O. DEVILLERS, A. FRONVILLE, B. MOURRAIN, M. TEILLAUD. – «Algebraic Methods and Arithmetic Filtering for Exact Predicates on Circle Arcs». – *Rapport RR-3826*, INRIA, 1999. – <https://hal.inria.fr/inria-00072832>. – hal:inria-00072832.
- [263] O. DEVILLERS, P.-M. GANDOIN. – «Rounding Voronoi Diagram». – *Rapport RR-3481*, INRIA, 1998. – <https://hal.inria.fr/inria-00073208>. – hal:inria-00073208.
- [264] O. DEVILLERS. – «On Deletion in Delaunay Triangulation». – *Rapport RR-3451*, INRIA, 1998. – <https://hal.inria.fr/inria-00073239>. – hal:inria-00073239.
- [265] O. DEVILLERS, F. P. PREPARATA. – «Further Results on Arithmetic Filters for Geometric Predicates». – *Rapport RR-3528*, INRIA, 1998. – <https://hal.inria.fr/inria-00073157>. – hal:inria-00073157.

2000

1999

1998

- [266] O. DEVILLERS, A. MUKHOPADHYAY. – «Finding an Ordinary Conic and an Ordinary Hyperplane». – *Rapport RR-3517*, INRIA, 1998. – <https://hal.inria.fr/inria-00073167>. – hal:inria-00073167.
- [267] O. DEVILLERS. – «Computational Geometry and Discrete Computations». – *Rapport RR-3533*, INRIA, 1998. – <https://hal.inria.fr/inria-00073152>. – hal:inria-00073152.
- [268] O. DEVILLERS, G. LIOTTA, F. P. PREPARATA, R. TAMASSIA. – «Checking the Convexity of Polytopes and the Planarity of Subdivisions». – *Rapport RR-3527*, INRIA, 1998. – <https://hal.inria.fr/inria-00073158>. – hal:inria-00073158.
- 1997 [269] P. ALLIEZ, O. DEVILLERS, J. SNOEYINK. – «Removing Degeneracies by Perturbing the Problem or the World». – *Rapport RR-3316*, INRIA, 1997. – <https://hal.inria.fr/inria-00073373>. – hal:inria-00073373.
- [270] J.-D. BOISSONNAT, O. DEVILLERS, S. LAZARD. – «Motion Planning of Legged Robots». – *Rapport RR-3214*, INRIA, 1997. – <https://hal.inria.fr/inria-00073475>. – hal:inria-00073475.
- [271] O. DEVILLERS. – «Improved Incremental Randomized Delaunay Triangulation.». – *Rapport RR-3298*, INRIA, 1997. – <https://hal.inria.fr/inria-00073390>. – hal:inria-00073390.
- 1996 [272] L. TANCREDI, M. TEILLAUD, O. DEVILLERS. – «Symbolic Elimination for Parallel Manipulators». – *Rapport RR-2809*, INRIA, 1996. – <https://hal.inria.fr/inria-00073883>. – hal:inria-00073883.
- [273] O. DEVILLERS, M. J. KATZ. – «Optimal Line Bipartitions of Point Sets». – *Rapport RR-2871*, INRIA, 1996. – <https://hal.inria.fr/inria-00073820>. – hal:inria-00073820.
- [274] M. D. BERG, O. DEVILLERS, M. V. KREVELD, O. SCHWARZKOPF, M. TEILLAUD. – «Computing the Maximum Overlap of Two Convex Polygons Under Translations». – *Rapport RR-2832*, INRIA, 1996. – <https://hal.inria.fr/inria-00073859>. – hal:inria-00073859.
- [275] O. DEVILLERS, F. P. PREPARATA. – «A Probabilistic Analysis of the Power of Arithmetic Filters». – *Rapport RR-2971*, INRIA, 1996. – <https://hal.inria.fr/inria-00073727>. – hal:inria-00073727.
- 1995 [276] J.-D. BOISSONNAT, J. CZYZOWICZ, O. DEVILLERS, J. URRUTIA, M. YVINEC. – «Computing Largest Circles Separating Two Sets of Segments». – *Rapport RR-2705*, INRIA, 1995. – <https://hal.inria.fr/inria-00073985>. – hal:inria-00073985.
- [277] M. DE BERG, O. DEVILLERS, K. DOBRINDT, O. SCHWARZKOPF. – «Computing a Single Cell in the Union of two Simple Polygons». – *Rapport RR-2626*, INRIA, 1995. – <https://hal.inria.fr/inria-00074061>. – hal:inria-00074061.
- 1994 [278] O. DEVILLERS, M. GOLIN, K. KEDEM, S. SCHIRRA. – «Revenge of the Dog : Queries on Voronoi Diagrams of Moving Points». – *Research Report RR-2329*, INRIA, 1994. – <https://hal.inria.fr/inria-00074345>. – hal:inria-00074345.
- [279] O. DEVILLERS, M. GOLIN. – «Incremental algorithms for finding the convex hulls of circles and the lower envelopes of parabolas». – *Research Report RR-2280*, INRIA, 1994. – <https://hal.inria.fr/inria-00074391>. – hal:inria-00074391.
- [280] F. AVNAIM, J.-D. BOISSONNAT, O. DEVILLERS, F. P. PREPARATA, M. YVINEC. – «Evaluating signs of determinants using single-precision arithmetic». – *Research Report RR-2306*, INRIA, 1994. – <https://hal.inria.fr/inria-00074367>. – hal:inria-00074367.
- [281] O. DEVILLERS, M. GOLIN. – «Dog bites postman : point location in the moving Voronoi diagram and related problems». – *Research Report RR-2263*, INRIA, 1994. – <https://hal.inria.fr/inria-00074408>. – hal:inria-00074408.
- [282] J.-D. BOISSONNAT, J. CZYZOWICZ, O. DEVILLERS, J.-M. ROBERT, M. YVINEC. – «Convex Tours of Bounded Curvature». – *Research Report RR-2375*, INRIA, 1994. – <https://hal.inria.fr/inria-00074301>. – hal:inria-00074301.
- [283] J.-D. BOISSONNAT, J. CZYZOWICZ, O. DEVILLERS, M. YVINEC. – «Circular Separability of Polygons». – *Rapport RR-2406*, INRIA, 1994. – <https://hal.inria.fr/inria-00074269>. – hal:inria-00074269.
- 1993 [284] O. DEVILLERS, A. FABRI. – «Scalable algorithms for bichromatic line segment intersection problems on coarse grained multicomputers». – *Research Report RR-1882*, INRIA, 1993. – <https://hal.inria.fr/inria-00074791>. – hal:inria-00074791.
- [285] J.-D. BOISSONNAT, A. CEREZO, O. DEVILLERS, J. DUQUESNE, M. YVINEC. – «An Algorithm for constructing the convex hull of a set of spheres in dimension  $d$ ». – *Research Report RR-2080*, INRIA, 1993. – <https://hal.inria.fr/inria-00074591>. – hal:inria-00074591.



- 1992 [286] O. DEVILLERS, S. MEISER, M. TEILLAUD. – «The space of spheres, a geometric tool to unify duality results on Voronoi diagrams». – *Research Report RR-1620*, INRIA, 1992. – <https://hal.inria.fr/inria-00074941>. – hal:inria-00074941.
- [287] O. DEVILLERS. – «Robust and efficient implementation of the Delaunay tree». – *Research Report RR-1619*, INRIA, 1992. – <https://hal.inria.fr/inria-00074942>. – hal:inria-00074942.
- [288] J.-D. BOISSONNAT, O. DEVILLERS, F. P. PREPARATA, L. DONATI. – «Motion planning of legged robots : the spider robot problem». – *Research Report RR-1767*, INRIA, 1992. – <https://hal.inria.fr/inria-00077007>. – hal:inria-00077007.
- 1991 [289] O. DEVILLERS. – «Randomization yields simple  $O(n \log n)$  algorithms for difficult  $(n)$  problems». – *Research Report RR-1412*, INRIA, 1991. – <https://hal.inria.fr/inria-00075148>. – hal:inria-00075148.
- [290] J.-D. BOISSONNAT, A. CEREZO, O. DEVILLERS, M. TEILLAUD. – «Output sensitive construction of the 3D Delaunay triangulation of constrained sets of points». – *Research Report RR-1415*, INRIA, 1991. – <https://hal.inria.fr/inria-00075145>. – hal:inria-00075145.
- [291] O. DEVILLERS, M. TEILLAUD, M. YVINEC. – «Dynamic location in an arrangement of line segments in the plane». – *Research Report RR-1558*, INRIA, 1991. – <https://hal.inria.fr/inria-00075003>. – hal:inria-00075003.
- 1990 [292] O. DEVILLERS. – «Simultaneous containment of several polygons : analysis of the contact configurations». – *Research Report RR-1179*, INRIA, 1990. – <https://hal.inria.fr/inria-00075379>. – hal:inria-00075379.
- [293] O. DEVILLERS, S. MEISER, M. TEILLAUD. – «Fully dynamic Delaunay triangulation in logarithmic expected time per operation». – *Research Report RR-1349*, INRIA, 1990. – <https://hal.inria.fr/inria-00075210>. – hal:inria-00075210.
- [294] J.-D. BOISSONNAT, O. DEVILLERS, F. P. PREPARATA. – «Computing the union of 3-colored triangles». – *Research Report RR-1293*, INRIA, 1990. – <https://hal.inria.fr/inria-00075266>. – hal:inria-00075266.
- [295] J.-D. BOISSONNAT, O. DEVILLERS, R. SCHOTT, M. TEILLAUD, M. YVINEC. – «Applications of random sampling to on-line algorithms in computational geometry». – *Research Report RR-1285*, INRIA, 1990. – <https://hal.inria.fr/inria-00075274>. – hal:inria-00075274.
- [296] J.-D. BOISSONNAT, O. DEVILLERS, M. TEILLAUD. – «A dynamic construction of higher order Voronoi diagrams and its randomized analysis». – *Research Report RR-1207*, INRIA, 1990. – <https://hal.inria.fr/inria-00075351>. – hal:inria-00075351.
- 1987 [297] O. DEVILLERS, F. X. SILLION, C. PUECH. – «CIL : un modèle d'illumination intégrant les réflexions diffuse et spéculaire». – *Research report*, Laboratoire d'Informatique de l'École Normale Supérieure, 1987. – <https://hal.inria.fr/hal-01117282>. – hal:hal-01117282.

## Posters et conférences sans proceedings

- 2014 [298] N. BROUTIN, O. DEVILLERS, R. HEMSLEY. – «The Maximum Degree of a Random Delaunay Triangulation in a Smooth Convex». – AofA 2014 - 25th International Conference on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms (2014), 2014. – Poster. – <https://hal.inria.fr/hal-01018187>. – hal:hal-01018187.
- [299] L. CASTELLI ALEARDI, O. DEVILLERS, E. FUSY. – «Crossing-free straight-line drawing of graphs on the flat torus». – Workshop on Geometric Structures with Symmetry and Periodicity, 2014. – Workshop is part of the Computational Geometry week. – <https://hal.inria.fr/hal-01018627>. – hal:hal-01018627.
- [300] O. DEVILLERS, P. DUCHON, R. THOMASSE. – «A generator of random convex polygons in a disc». – AofA 2014- 25th International Conference on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms, 2014. – Poster. – <https://hal.inria.fr/hal-01015603>. – hal:hal-01015603.
- [301] O. DEVILLERS, M. GLISSE, R. THOMASSE. – «A chaotic random convex hull». – AofA 2014- 25th International Conference on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms, 2014. – Poster. – <https://hal.inria.fr/hal-01015598>. – hal:hal-01015598.
- 2013 [302] K. BUCHIN, O. DEVILLERS, W. MULZER, O. SCHRIJVERS, J. SHEWCHUK. – «Vertex Deletion for 3D Delaunay Triangulations». – Symposium on Theory of Computing, 2013. – Poster. – <https://hal.inria.fr/hal-00963520>. – hal:hal-00963520.

1999

- [303] M. BOGDANOV, O. DEVILLERS, M. TEILLAUD. – «Tiling the hyperbolic plane». – Bending Reality : Where art and science meet, 2013. – Poster. – <https://hal.inria.fr/hal-01018725>. – hal:hal-01018725.
- [304] O. DEVILLERS, J.-M. MOREAU. – «Gedeon», 1999. – Lettre d'information. – <https://hal.inria.fr/hal-00925755>. – hal:hal-00925755.