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## Matthieu GENDULPHE

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**PERSONAL** Born 22 April 1979 in Senlis, France

**RESEARCH INTERESTS** Hyperbolic geometry, Teichmüller spaces, Systolic geometry

**EDUCATION**

**Bordeaux 1 University**, France

Ph.D, Pure Mathematics, July 2006

- Thesis Topic: *Systolic landscape of hyperbolic surfaces of low genus*
- Adviser: Prof. Christophe Bavard
- Referees: Prof. Peter Buser and Prof. Ruth Kellerhals

**Rennes 1 University** and **École Normale Supérieure de Cachan**, France

M.S, Pure Mathematics, September 2003

- Thesis Topic: *Extremal geometry of Riemann surfaces*
- Adviser: Dr. Serge Cantat

Agrégation de Mathématiques, July 2002

**Paul Sabatier University**, Toulouse, France

B.S, Pure Mathematics, June 2001

**ACADEMIC EXPERIENCE**

**Fribourg University**, Switzerland **Since October 2008**

*Postdoc* in the team of Prof. Ruth Kellerhals

**Bar Ilan University**, Israël **October 2007 to September 2008**

*Postdoc (Kalman-Soref fellowship)*

**Bordeaux 1 University** **October 2003 to August 2007**

*Researcher and Teaching Assistant*, September 2006 to August 2007

*Graduate Researcher and Teaching Assistant*, October 2003 to August 2006

**École Normale Supérieure de Cachan** **September 2001 to August 2003**

*Civil servant as student at the ENS Cachan*

**PUBLICATIONS**

*Découpages et inégalités systoliques pour les surfaces hyperboliques à bord* (2009)  
Geom. Dedicata 142:23-35.

*Constante de Bers en genre 2* (2007)  
To appear in Math. Annalen

*Polyhedral realization of a Thurston compactification* (2010)  
Preprint, in collaboration with Y. Komori (Osaka City University)

*Inégalités systoliques optimales des surfaces hyperboliques non orientables* (2009)  
Preprint

*Paysage systolique des surfaces hyperboliques de caractéristique  $-1$*  (2006)  
Preprint

## TALKS

**Seminar Talks**

Geometry and Dynamical Systems Seminar , <i>Dijon</i> , France	29 April '10
Seminar GT3, <i>Strasbourg</i> , France	1 February '10
Geometry Seminar, <i>Bordeaux</i> , France	1 December '09
Algebra and Geometry Seminar, <i>Geneva</i> , Switzerland	2 December '08
Geometry and Topology Seminar, <i>Fribourg</i> , Switzerland	5 November '08
Geometry and Ergodic Theory Seminar, <i>Lausanne</i> , Switzerland	30 October '08
Arithmetic, Topology and Geometry Seminar, <i>Bar Ilan</i> , Israël	28 November '07
Arithmetic, Topology and Geometry Seminar, <i>Bar Ilan</i> , Israël	21 November '07
Analytic Geometry Seminar, <i>Rennes</i>	14 June '07
Geometry Seminar, <i>Tours</i> , France	17 February '07
Geometry and Singularities Seminar, <i>Marseille</i>	16 January '07
Geometry and Topology Seminar, <i>Fribourg</i>	13 December '06
Gaston Darboux Seminar, <i>Montpellier</i>	21 April '06

**Conference Talks**

Teichmüller spaces and Riemann surfaces, <i>Montpellier</i>	26 May '07
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## PARTICIPATION

**Conferences and Workshops**

<i>Topology and Geometry in dimension 3</i> , Marseille, France	5-16 September '10
<i>Fundamental Group and Hyperbolic Geometry</i> , Toulouse, France	2-4 December '09
<i>Nevanlinna Colloquium</i> , Kyoto, Japan	7-11 September '09
<i>Seminar on Bounded Cohomology</i> , Oberwolfach, Germany	31 May - 6 June '09
<i>Swiss Knots</i> , Fribourg, Switzerland	19-21 March '09
<i>Braids in Paris</i> , Paris, France	17-20 September '08
<i>Hirzebruch 80</i> , Bar Ilan, Israël	18-23 May '08
<i>Teichmüller spaces and Riemann surfaces</i> , Montpellier, France	22-24 May '07
<i>Ricci flow and the Poincaré conjecture</i> , Lyon, France	3-4 February '06
<i>Spaces of Negative Curvature</i> , Lausanne, Switzerland	31 October - 4 November '05
<i>Henri Poincaré 150</i> , Paris, France	16-18 December '04

**Summer and Winter Schools**

<i>Discrete Groups in Complex Geometry</i> , ICTP Trieste, Italy	5-18 July '10
<i>Geometry, Topology and Computation in Groups</i> , Les Diablerets, Switzerland	1-12 March '10

	<i>Bounded Cohomology, Coxeter Groups and Hyperbolic Geometry,</i> Fribourg, Switzerland	18-20 August '08
	<i>Sphere Packings, Perfect Forms and Applications,</i> Bordeaux, France	5-9 September '06
	<i>Systolic and other inequalities - Aspects of the Geometry and Topology of Hyperbolic Manifolds,</i> Lausanne, Switzerland	22-26 August '05
ORGANIZATION	Weil-Petersson Day, one day on the Weil-Petersson metric of Teichmüller spaces Fribourg University	16 June 2009
	Rencontres du 3 <sup>e</sup> cycle, national conference for Ph.D. students in Mathematics Bordeaux 1 University	1-3 June 2005
LECTURER	<b>University of Fribourg</b>	
	<i>Discrete Mathematics:</i> Graph Theory, Automata, Regular Languages, Combinatorics, Logic - Bachelor of Computer Science	2010/11
TEACHING ASSISTANT	<b>University of Fribourg</b>	
	<i>Discrete Mathematics</i> - Bachelor of Computer Science	2008/09 2009/10
	<b>University Bordeaux 1</b>	
	<i>Quadratic Spaces:</i> Quadratic/Symplectic Forms, Witt Theorem, Orthogonal Groups, Quaternions - Master of Mathematics	2006/07
	<i>Differential Geometry:</i> Submanifolds, Vector Fields, Differential Forms, Curves and Surfaces in Euclidean Space - Bachelor of Mathematics	2004/05 2005/06 2006/07
	<i>Introduction to Algebra:</i> Linear Algebra, Determinants, Linear Systems, Polynomials Bachelor of Physics	2006/07
	<i>Real Analysis:</i> Taylor's formula, Parametrized Curves, Functions of Many Variables, Bachelor of Physics	2003/04 2004/05 2005/06
RESPONSABILITIES	President of the association Lambda of Ph.D. students in Mathematics Bordeaux 1 University	2004/05
	Elected member at the council of the doctoral school Bordeaux 1 University	2004/05 2005/06
MISCELLANEOUS	Translation from English to French of one chapter of the book <i>L'héritage scientifique d'Henri Poincaré</i> É. Charpentier, É. Ghys and A. Lesne editors, Belin 2006	
	I took lecture notes of the conference <i>De la transversalité de Thom au h-principe de Gromov</i> given by Prof. François Laudenbach. This will appear in <i>Les Leçons de Mathématiques d'Aujourd'hui</i> , É. Charpentier editor, Cassini	
	I have participated in <i>Math en Jeans</i> , a mathematical activity for high school students.	