

# CURRICULUM VITAE OF STEFAN WENGER

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Department of Mathematics, Statistics,  
and Computer Science (M/C 249)  
University of Illinois at Chicago  
851 S. Morgan Street  
Chicago, IL 60607-7045

phone: +1 312 996-2440  
email: [wenger@math.uic.edu](mailto:wenger@math.uic.edu)  
<http://www.math.uic.edu/~wenger>

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## ACADEMIC EMPLOYMENT

- 2008 – Assistant Professor, University of Illinois at Chicago, Chicago, USA
- 2007 – 2008 Courant Instructor, Courant Institute of Mathematical Sciences, New York University, New York, USA
- 2006 – 2007 Postdoc, Courant Institute (Sep – Dec 06) and Université Paris-Sud (Feb – Aug 07), with Fellowship of the Swiss National Science Foundation SNF
- 2005 – 2006 Courant Instructor, Courant Institute of Mathematical Sciences, New York University, New York, USA
- 2004 – 2005 Postdoc, University of Basel, Switzerland

## EDUCATION

- Jun 01 – Oct 04 PhD student in Mathematics, ETH Zürich, Switzerland  
*Isoperimetric inequalities of Euclidean type and applications*  
Advisor: Urs Lang
- Oct 99 – Feb 00 Diploma thesis, ETH Zürich
- Oct 94 – Sep 99 Study of Mathematics at ETH Zürich

## HONORS, GRANTS, AWARDS

- May 11 – May 16 PI for NSF CAREER Grant DMS-1056263 (Geometric Analysis)
- Fall 2011 Membership, Mathematical Sciences Research Institute MSRI, Berkeley CA
- July 10 – June 15 Member of the European Research Council Advanced Grant *Geometric Measure Theory in Non-Euclidean Spaces* (Principal Investigator: Luigi Ambrosio)
- Sep 07 – Aug 11 PI for NSF Grants DMS-0707009 and DMS-0956374 (Geometric Analysis)
- Sep 06 – Aug 07 Postdoctoral Fellowship of the Swiss National Science Foundation SNF
- June 2005 ETH Medal for PhD thesis
- Jun 05 – Aug 05 Junior Fellowship of the Erwin Schroedinger Institute, Vienna, Austria
- Nov 04 – May 05 Postdoctoral Research Grant of the Swiss National Science Foundation SNF
- Apr 02 – Apr 04 Graduate Research Grant of the Swiss National Science Foundation SNF

#### HONORS, GRANTS, AWARDS (CONT.)

- November 2000    ETH Medal for diploma thesis and ETH Diploma with distinction  
Aug 00 – Oct 00    Research Grant of the Max Planck Institute Leipzig, Germany

#### VISITING POSITIONS AND INVITED RESEARCH STAYS (MINIMUM 1 MONTH)

- Aug – Dec    2011    Research Member, Mathematical Sciences Research Institute MSRI, Berkeley CA  
Feb – Mar    2011    Professeur Invité, Institut Henri Poincaré, Paris, France  
February    2010    Professeur Invité, Université Catholique de Louvain, Belgium  
Jun – Jul    2009    Professeur Invité, Université de Nice Sophia Antipolis, Nice, France  
April        2007    University of Michigan, Ann Arbor  
January      2007    Max Planck Institute for Mathematics, Bonn, Germany  
Jul – Aug    2006    Forschungsinstitut für Mathematik (FIM), ETH Zürich, Switzerland  
Jun – Aug    2005    Erwin Schroedinger Institute for Mathematical Physics, Vienna, Austria

#### PREPRINTS AND PUBLICATIONS

17. with U. Lang: *The pointed flat compactness theorem for locally integral currents*, **Comm. in Analysis and Geometry**, to appear, 24 pages.
16. *Nilpotent groups without exactly polynomial Dehn functions*, **Journal of Topology** **4** (2011), no. 1, 141–160.
15. with C. Sormani: *The Intrinsic flat distance between Riemannian manifolds and other integral current spaces*, **Journal of Differential Geometry**, to appear, 78 pages, available at arXiv:1002.1073v4.
14. *The asymptotic rank of metric spaces*, **Commentarii Mathematici Helvetici** **86** (2011), no. 2, 247–275.
13. with L. Ambrosio: *Rectifiability of flat chains in Banach spaces with coefficients in  $\mathbb{Z}_p$* , **Math. Zeitschrift** **268** (2011), no. 1–2, 477–506.
12. *Compactness for manifolds and integral currents with bounded diameter and volume*, **Calc. Var. and Partial Differential Equations** **40** (2011), no. 3–4, 423–448.
11. with R. Young: *Lipschitz extensions into jet space Carnot groups*, **Math. Res. Lett.** **17** (2010), no. 6, 1137–1149.
10. with S. Rigot: *Lipschitz non-extension theorems into jet space Carnot Groups*, **Int. Math. Res. Not.** (2010), no. 18, 3633–3648.
9. with C. Sormani: *Weak convergence of currents and cancellation*, with an appendix by R. Schul, **Calc. Var. and Partial Differential Equations** **38** (2010), no. 1–2, 183–206.

#### PREPRINTS AND PUBLICATIONS (CONT.)

8. *Characterizations of metric trees and Gromov hyperbolic spaces*, **Math. Res. Lett.** **15** (2008), no. 5, 1017–1026.
7. *A short proof of Gromov's filling inequality*, **Proc. Amer. Math. Soc.** **136** (2008), no. 8, 2937–2941.
6. *Gromov hyperbolic spaces and the sharp isoperimetric constant*, **Invent. Math.** **171** (2008), no. 1, 227–255.
5. with U. Lang: *Isoperimetric inequalities and the asymptotic geometry of Hadamard spaces*, in **L'Enseignement Mathématique (2)** **54** (2008), fasc. 1-2.
4. *Flat convergence for metric integral currents*, **Calc. Var. and Partial Differential Equations** **28** (2007), no. 2, 139–160.
3. *Filling invariants at infinity and the Euclidean rank of Hadamard spaces*, **Int. Math. Res. Not.** (2006), Volume 2006, Article ID 83090, 33 pages.
2. *Isoperimetric inequalities of Euclidean type in metric spaces*, **Geom. Funct. Anal.** **15** (2005), no. 2, 534–554.
1. *Isoperimetric inequalities of Euclidean type and applications*, PhD thesis, ETH Zürich (2004).

#### REFEREE SERVICES

Annals of Mathematics, Geom. Funct. Anal. (GAFA), Calc. Var. and Partial Differential Equations, Geometry and Topology, Journal of Geometric Analysis, American Journal of Mathematics, Journal of Topology and Analysis, Real Analysis Exchange, Mediterranean Journal of Mathematics

#### CONFERENCE TALKS

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|---------|---|
| 03/2011 | Metric Geometry, Algorithms and Groups, Institut Henri Poincaré, Paris, France                    |
| 05/2010 | Workshop on Non-Riemannian Mapping Theory and Geometry, Bern, Switzerland                         |
| 03/2010 | Geometric Groups on the Gulf Coast, Pensacola Beach FL  |
| 04/2009 | Southeastern Geometry Conference, University of Georgia, Athens GA                                |
| 03/2009 | American Mathematical Society Spring Central Sectional Meeting, Urbana IL                         |
| 08/2008 | 18th Jyväskylä Summer School, lecturer, Jyväskylä, Finland  |
| 05/2008 | Glimpses of geometry, Lyon, France  |
| 01/2008 | Geometric Analysis and its Applications, University of Bern, Switzerland                          |
| 07/2007 | Differentialgeometrie im Grossen, Workshop at MFO, Oberwolfach, Germany                           |
| 02/2007 | Groups007: Aspects of hyperbolicity, convergence groups, CIRM Marseille, France                   |
| 04/2006 | American Mathematical Society Spring Eastern Section Meeting, University of New Hampshire, Durham |
| 09/2003 | Metric, curvature, characteristic cycles and classes, Münster, Germany                            |

## SEMINAR TALKS

- 04/2011 Colloquium, Georgia Southern University, Statesboro GA
- 02/2011 Colloquium, Karlsruhe Institute of Technology, Karlsruhe, Germany
- 02/2011 Topology and Group Theory Seminar, Vanderbilt University, Nashville TN
- 06/2010 Geometry Seminar, ETH Zürich, Switzerland
- 06/2010 Colloquium, University of Fribourg, Switzerland
- 05/2010 Colloquium, University of Bern, Switzerland
- 04/2010 Geometric Analysis Seminar, Michigan State University, East Lansing MI
- 11/2009 Geometry and Topology Seminar, University of Wisconsin, Madison WI
- 06/2009 Geometry and Analysis Seminar, Université de Nice, France
- 05/2009 Geometry and Topology Seminar, University of Toronto, Canada
- 01/2009 Dynamics and Geometry Seminar, Penn State, State College PA
- 12/2008 Geometry Seminar, ETH Zürich, Switzerland
- 11/2008 Geometry Seminar, MIT, Cambridge MA
- 03/2008 Dynamics and Geometry Seminar, Penn State, State College PA
- 02/2008 Special colloquium, University of Georgia, Athens GA
- 02/2008 Special colloquium, University of South Carolina, Columbus SC
- 01/2008 Special colloquium, University of Indiana, Bloomington IN
- 01/2008 Special colloquium, Hausdorff Center for Mathematics, Bonn, Germany
- 01/2008 Special colloquium, CUNY, New York NY
- 01/2008 Special colloquium, University of Illinois at Chicago, Chicago IL
- 12/2007 Special colloquium, University of Illinois Urbana-Champaign, Urbana IL
- 10/2007 Differential Geometry Seminar, University of Illinois Urbana-Champaign, Urbana IL
- 05/2007 Séminaire de Géométrie, EPFL Lausanne, Switzerland
- 04/2007 Geometric Function Theory Seminar, University of Michigan, Ann Arbor MI
- 03/2007 Séminaire Géométrie Dynamique, Université Lille 1, France
- 01/2007 Differential Geometry Seminar, Universität Bonn, Germany
- 12/2006 Geometric Group Theory Seminar, Université Paris-Sud, France
- 12/2006 Geometry Seminar, University of Freiburg i. Brsg, Germany
- 12/2006 Geometry-Topology Seminar, University of Pennsylvania, Philadelphia PA
- 11/2006 Geometric Function Theory Seminar, University of Michigan, Ann Arbor MI
- 05/2006 Topology and Geometric Group Theory Seminar, Cornell University, Ithaca NY
- 04/2006 Geometry and Topology Seminar, University of Pennsylvania, Philadelphia PA
- 03/2006 Geometric Analysis Seminar, Princeton University
- 10/2005 Analysis Seminar, Courant Institute, New York
- 05/2004 Applied Analysis and Mechanics Seminar, University of Oxford, England

#### CO-ORGANIZER

- AIM Workshop *Mapping Theory in Metric Spaces* (joint with L. Capogna, J. Tyson), American Institute of Mathematics, Palo Alto, CA, January 2012
- Summer School on Filling Invariants and Asymptotic Geometry (joint with D. Fisher, R. Young), Indiana University, Bloomington, IN, Summer 2011
- ERC Winter School *Geometric Measure Theory and Analysis in Metric Spaces* (joint with L. Ambrosio, V. Magnani), Pisa, January 2011
- Differential Geometry and Topology Seminar, Courant Institute, New York, Fall 06, 07, Spring 08.
- New York City Rigidity Theory Workshop (joint with C. Sormani), Courant Institute, New York, March 2006
- Mini-workshop on *Isoperimetric inequalities in Lie Groups* (joint with A. Wienhard), Basel, Switzerland, March 2005
- *Conference on bounded cohomology, harmonic maps and Higgs bundles* (joint with O. Baues, O. Bi-quard, A. Iozzi, A. Wienhard), Strasbourg and Basel, March 2005
- Preparatory workshop for the Spring School on Geometric Measure Theory, Les Diablerets, Switzerland, February 2005

#### COURSES TAUGHT

March	2011	Lecturer of mini-course on Isoperimetric inequalities and the structure of metric spaces, Institut Henri Poincaré, Paris, France
Fall	2010	Instructor of Analysis I, University of Illinois at Chicago
Fall	2010	Instructor of Diff. Manifolds I (graduate level), University of Illinois at Chicago
February	2010	Lecturer of mini-course on The intrinsic flat distance between Riemannian manifolds, Université Catholique de Louvain, Belgium
Fall	2009	Instructor of Analysis I, University of Illinois at Chicago
Fall	2009	Instructor of Diff. Manifolds I (graduate level), University of Illinois at Chicago
Spring	2009	Instructor of Introduction to Topology II, University of Illinois at Chicago
Fall	2008	Instructor of Introduction to Topology I, University of Illinois at Chicago
Summer	2008	Lecturer of mini-course on Isoperimetric problems in metric spaces, 18th Jyväskylä Summer School, Jyväskylä, Finland
Spring	2008	Instructor of Diff. Geometry II (graduate level), New York University
Fall	2007	Instructor of Topology I (graduate level), New York University
April	2007	Lecturer of mini-course on Currents in metric spaces, University of Michigan, Ann Arbor
Fall	2006	no teaching
Spring	2006	Instructor of Ordinary Differential Equations, New York University
Fall	2005	Instructor of Calculus I, New York University
2000 - 2004		Teaching Assistant (for courses Calculus I, Measure theory, Probability, Discrete Mathematics), ETH Zürich, Switzerland