

# Ilaria Mondello

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## Current Position

**Associate professor (maître de conférence)**

From September 2016

Université de Paris-Est Créteil, LAMA.

## Previous positions and education

**Postdoc, MSRI Semester in Differential Geometry**

January - May 2016

Mathematical Sciences Research Institute, Berkeley.

**Postdoc, Fondation Sciences Mathématiques de Paris**

2015-2017

Institut de Mathématiques de Jussieu, Paris.

**Ph.D. in Mathematics**

**Title of the Ph.D. thesis:** The Yamabe Problem on Stratified Spaces.

2012-2015

**Advisor:** Gilles Carron, Laboratoire de Mathématiques Jean Leray, Nantes.

**Master Degree in Mathematics**

Grade: 110/110 cum laude (with honors)

2010–2012

Università degli Studi di Milano Bicocca, Milano

**Master Thesis:** *Continuum Limit for Discrete Non-Linear Schrödinger Equation*

**Advisors:** Gigliola Staffilani, Susanna Terracini.

**Scholarships during the Master Degree**

Visiting Student at Massachusetts Institute of Technology

February-May 2012

ExtraPlus Scholarship, Fondazione Cariplo

Universidad Autónoma de Madrid

February-June 2011

Erasmus Scholarship

**Bachelor Degree in Mathematics**

Grade: 110/110

2007–2010

Università degli Studi di Milano Bicocca, Milano

**Bachelor Thesis:** *Riemann Surfaces and the Riemann-Roch Theorem.*

**Advisor:** Alessandro Ghigi.

## Publications

Ilaria Mondello, *The Local Yamabe constant of Einstein stratified spaces*, Annales de l'Institut Henri Poincaré Analyse Non Linéaire **34** (2017), no. 1, 249-275, arXiv:1411.7996.

Ilaria Mondello, *An Obata singular theorem for stratified spaces*, to appear in Transactions of the American Mathematical Society, arXiv:1511.08093.

J. Bertrand, C. Ketterer, I. Mondello, T. Richard, *A new geometric and singular example of  $RCD(K,N)$  space*, in preparation.

### Survey articles

Ilaria Mondello, *The Yamabe problem on stratified spaces* (2017), to appear in the *Oberwolfach reports*.

## Talks

### Conference talks

Intense activity period: Metric measure spaces and Ricci curvature, MPIM, Bonn.	Sept. 2017
Analysis, geometry and topology of positive scalar curvature metrics, Oberwolfach.	August 2017
Young Women in Geometry, Max Planck Institute for Mathematics, Bonn.	April 2017
Workshops Space of metrics, Bordeaux.	March 2017
France-Italy meeting in Geometric Analysis, Centro Ennio de Giorgi, Pisa.	February 2017
Geometria Reale e Complessa, Levico Terme.	October 2016
Follow-up workshop Optimal Transport, HIM, Bonn.	August 2016
Reflections on Global Riemannian Geometry, Townsend, Tennessee.	August 2016
Geometric Analysis on Riemannian and singular metric measure spaces, Como.	July 2016
Analysis, geometry and topology of stratified spaces, CIRM, Marcheille.	June 2016
Geometry and topology of open manifolds, ANR meeting, Bordeaux.	October 2015
Geometric C.O.R.P, Seillac.	Septembre 2015
Journée du Laboratoire Jean Leray, Nantes.	July 2015

### Seminar talks

DFG Graduiertenkolleg, University of Regensburg.	January 2018
Geometry seminar, University of Lorraine, Nancy.	November 2017
Geometry and topology seminar, University of Luxembourg.	June 2017
Analysis seminar, University of Freiburg.	June 2017
Geometry, Topology and Dynamics seminar, Orsay.	Janvier 2017
Darboux seminar, Institut Montpelliérain A. Grothendieck.	December 2016
Differential geometry seminar, Mathematical Institute Münster.	November 2016
Functional analysis seminar, Université de Lille.	November 2016
Geometry seminar, LAMA, Paris.	October 2016
Postdoc Lunch Seminar, MSRI, Berkeley.	March 2016
Geometry and analysis seminar, Laboratoire Dieudonné, Nice.	December 2015
Real analysis seminar, Institut de Mathématiques de Toulouse.	December 2015
Spectral theory and geometry seminar, Institut Fourier, Grenoble.	November 2015
Analysis and geometry seminar, IMJ, Paris.	November 2015
Non linear PDEs seminar, LAGA, Paris 13.	October 2015
Geometry seminar, Tokyo Institute of Technology.	July 2015
Geometry and topology seminar, Université de Bretagne Occidentale, Brest.	March 2015

Geometry seminar, Université de Nantes.	November 2014
Workshop on Steklov eigenvalues, Université de Nantes.	October 2013

## Organization Activities

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Organisation of the workshop <i>Geometry: exchanges and perspectives</i> , IHP.	February 2018
Member of the ANR project <i>Curvature constraints and space of metrics</i> .	from March 2017
Organisation of the “Five-minute Talks”, MSRI.	January 2016
Organisation of the Journée du Laboratoire Jean Leray.	July 2015
Organisation of the Séminaire des Doctorants de Nantes.	2013-2014

## Periods abroad

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Visiting C. Ketterer at the University of Freiburg.	June 2017
Postdoctoral Fellow at the Mathematical Sciences Research Institute	January-May 2016
Visiting K. Akutagawa at Tokyo Institute of Tehcnology	July 2015

## Awards

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PEPS (Projet exploratoire premier soutien) award from the CNRS.	2017
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## Teaching

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Master mini-course: <i>Metric spaces and Gromov-Hausdorff convergence</i> .	Sept. 2017
Journées de rentrée des Masters, Fondation Mathématique Jaques Hadamard, IHÉS.	
Curves and surfaces, third year of Mathematics.	2016 – 2018
Université de Paris-Est Créteil.	
Analysis 2, first year of Mathematics, Physics, Informatics and Engineering.	2016 – 2018
Université de Paris-Est Créteil.	
Analysis 1, first year of Mathematics, Physics, Informatics and Engineering.	2016 – 2018
Université de Paris-Est Créteil.	
Real Analysis, first year of Mathematics, Physics, Informatics and Engineering.	2013 – 2015
Université de Nantes.	

## Languages

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<b>Italian:</b> Mothertongue.	<b>French:</b> Fluent.
<b>English:</b> Fluent.	<b>Spanish:</b> Intermediate.

## Extra Information

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In March 2014 I won the prize for the best 120-second presentation of my thesis in the Journée des Doctorants of the Ecole Doctorale de Sciences et Technologies de l'Information et Mathématiques. This manifestation collected around eighty PhD students from the Universities of Nantes, Angers, Le Mans, Saint-Nazaire and La Roche sur Yon.

In May 2015 I participated in the Semaine d'étude Maths-entreprises (week of study Mathematics-

business), organised in Nantes by the GDR CNRS Mathématiques et entreprises and the Laboratoire Jean Leray.