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# Maríel Sáez Trumper

*Pontificia Universidad Católica de Chile*

## Research Interests

Geometric Analysis, Differential Geometry, Partial Differential Equations.

## Education

2000–2005 **Ph.D. in Mathematics**, *Stanford University*, California, USA.

Thesis title *On the relationship between the curve shortening flow and the parabolic Ginzburg-Landau.*

Adviser Rafe Mazzeo.

1994–2000 **Ingeniero Civil en Matemáticas (Professional degree)**, *Universidad de Chile*, Chile.

Undergraduate Thesis title *Estudio del fenómeno de extinción para una clase de Problemas Parabólicos con Difusión Rápida (English title: A study of the extinction phenomenon for a class of parabolic problems with fast diffusion).*

Adviser Manuel del Pino.

1994–1998 **Licenciatura en Ciencias de la Ingeniería mención Matemáticas**, *Universidad de Chile*, Chile.

## Honors and Awards

2015–2019 **Proyecto Fondecyt Regular 1150014 (Research Grant)**, *CONICYT*, Chile.

2011–2015 **Proyecto Fondecyt Regular 1110048 (Research Grant)**, *CONICYT*, Chile.

2010–2013 **Proyecto Anillo ACT-125, Center for Analysis of Partial Differential Equations (Research Grant)**, *Chile*.

2007–2010 **Proyecto Fondecyt 11070025 de Iniciación en Investigación (Research Grant)**, *CONICYT*, Chile.

2000 **Royden Fellowship**, *Stanford University*, USA.

1995–2000 **Outstanding Student Award**, *Facultad de Ciencias Físicas y Matemáticas*, *Universidad de Chile*, Chile.

1994 **Fellowship for Academic Excellence**, *Universidad de Chile*, Chile.

## Experience

2012–present **Associate Professor**, *Pontificia Universidad Católica de Chile*, Chile.

- 2008–2012 **Assistant Professor**, *Pontificia Universidad Católica de Chile*, Chile.
- 2005–2008 **Postdoctoral Fellow**, *Max Planck Institute for Gravitational Physics (Albert Einstein Institute)*, Germany.

### Selected Academic visits

- January–February, April–May, 2016 **Research Member**, *Mathematical Sciences Research Institute (MSRI)*, Program *Differential Geometry*, Berkeley, USA.
- Wintersemester 2013–2014 **Visiting professor at Berlin Mathematical School**, *Freie Universität*, Germany.
- August–November, 2008 **Research Member**, *Mathematical Sciences Research Institute (MSRI)*, Program *Analysis on Singular Spaces*, Berkeley, USA.
- April–July, 2008 **Visiting Ph.D student**, *Swiss Federal Institute of Technology (ETH)*, Zürich, Switzerland.

### Selected Academic Talks

- July 2016 **V Congreso Latino Americano de Matematicas (CLAM)**, session *Avances en Ecuaciones Diferenciales Parciales no lineales-Ecuaciones Diferenciales Parciales elípticas*, *Barranquilla*, Colombia.
- July 2016 **School of Differential Geometry**, *Instituto de Matematica Pura e Aplicada (IMPA)*, Minicourse, Rio de Janeiro, Brazil
- May 2016 **Columbia University**, *Seminar talk*, New York, USA.
- April 2016 **University of California at Santa Cruz**, *Seminar talk*, Santa Cruz, USA.
- December 2015 **Chinese University of Hong Kong**, *Seminar talk*, Hong Kong.
- December 2015 **3rd Chile-Japan Workshop**, *Osaka*, Japon.
- July 2015 **Coloquio Brasileiro**, *Instituto de Matematica Pura e Aplicada (IMPA)*, Rio de Janeiro, Brazil.
- February 2015 **Nonlinear elliptic PDEs at the End of the World**, *Punta Arenas*, Chile.
- April 2014 **University College London**, *Seminar talk*, London, UK.
- February 2014 **Conference Geometric Invariance and nonlinear PDE**, *Kioloa*, Australia.
- January 2014 **Universidad de Granada**, *Seminar talk*, Granada, Spain.
- August 2013 **I Conference of the Americas**, *Guanajuato*, Mexico.
- February 2013 **Università deli Studi di Milano**, *Seminar Talk*, Milan, Italy.
- January 2013 **Universitat Politècnica de Catalunya**, *Seminar talk*, Barcelona, Spain.
- August 2012 **IV CLAM conference**, *Cordoba*, Argentina.
- July 2012 **9th AIMS Conference on Dynamical Systems, Differential Equations and Applications**, *Orlando*, USA.
- January 2012 **IX Americas Conference on Differential Equations**, *Trujillo*, Perú.
- September 2011 **Conference on Geometric Evolution Equations**, *University of Konstanz*, Germany.
- September 2010 **Workshop Extrinsic Geometric Flows**, *Universidad de Valencia*, Spain.
- October 2009 **VIII Americas Conference on Differential Equations**, *Plenary talk*, Mexico.
- February 2008 **Universität Freiburg**, *Seminar talk*, Freiburg, Germany.
- December 2007 **Universidad Complutense de Madrid**, *Madrid*, Spain.

- July 2006 **Workshop Calculus of Variations**, *Mathematisches Forschungsinstitut Oberwolfach*, Germany.
- January 2000 **Workshop on Nonlinear Analysis**, *Valparaiso*, Chile.

## Workshops and Conferences attended (selected)

- April 2015 **CIMPA-ICTP Minimal Surfaces, overdetermined problems and geometric analysis.**, *Santiago*, Chile (organizer).
- August 2014 **International Congress of Mathematicians**, *Seoul*, Korea.
- July 2014 **Geometric Analysis Conference**, *Lisbon*, Portugal.
- July 2013 **IAS/Park City Mathematics Institute (PCMI) Summer program**, *Utah*, USA.
- July 2012 **Second Sino-Chilean conference Conference on Nonlinear Elliptic and Parabolic Equations**, *Santiago*, Chile (organizer).
- June-July 2008 **Clay Mathematics Institute 2008 Summer School: Evolution Equations**, *Zürich*, Switzerland.
- July 2008 **Calculus of Variations**, *Mathematisches Forschungsinstitut Oberwolfach*, Germany.

## Languages

- Spanish **Native**
- English **Fluent**
- German **Intermediate**
- French, Turkish **Basic**

## Other Information

- Citizenship **Chilean.**
- 2007–present **Reviewer for the AMS.**
- 2014–present **Coordinator of the mathematics section at "Programa de formación de capital humano", Conicyt, Chile.**
- 2016–present **Member of the study group for Fondecyt grant.**
- 2011–2013 **Member of the graduate studies committee Mathematics at P. Universidad Católica de Chile.**
- 2014–2017 **Director of the department of Mathematics at P. Universidad Católica de Chile.**