

René L. Quilodrán

CONTACT INFORMATION	970 Evans Hall Department of Mathematics University of California, Berkeley Berkeley, CA 94720-3840 USA	<i>E-mail:</i> rquilodr@math.berkeley.edu <i>WWW:</i> math.berkeley.edu/~rquilodr
RESEARCH INTERESTS	In mathematics: Euclidean harmonic analysis, extremizers for Fourier restriction inequalities, geometric measure theory, real analysis. Outside of mathematics: Applications of higher mathematics to the technology, software and finance industries.	
EDUCATION	University of California, Berkeley , Berkeley, California USA. Ph.D., Mathematics, 2006-2012. <ul style="list-style-type: none">• Dissertation Topic: “On extremizers for adjoint Fourier restriction inequalities and a result in incidence geometry”.• Advisor: Michael Christ. Universidad de Chile , Santiago, Chile. M.Engr., Mathematical Engineering, August, 2006. Highest honors. <ul style="list-style-type: none">• Dissertation Topic: “Study of differential equations for a lattice of particles”.• Advisor: Patricio Felmer. B.S. Mathematics, 2004. Highest honors.	
HONORS AND AWARDS	Prize Marcos Orrego Puelma, 2007. Given by the Institute of Engineers, Chile. Best engineering student graduating from the University of Chile in 2006.	
ACADEMIC EXPERIENCE	University of California, Berkeley , Berkeley, California USA. <i>Graduate Student</i> August, 2006 - present Includes current Ph.D. research, Ph.D. level coursework. <i>Instructor</i> June - August, 2008 Taught undergraduate course. Responsibility for lectures, exams, homework assignments, and grades. <ul style="list-style-type: none">• Math 53 Multivariable calculus, Summer 2008. <i>Teaching Assistant</i> January, 2007 - present Teacher assistant for several undergraduate level courses: calculus, multivariable calculus and linear algebra. University of Chile , Santiago, Chile <i>Teaching Assistant</i> August, 2002 - December 2005 Teacher assistant for several undergraduate level courses and honor courses: calculus, algebra, multivariable calculus, complex variables, calculus of variations.	
PUBLICATIONS	Quilodrán, R. 2011. <i>Nonexistence of extremals for the adjoint restriction inequality on the hyperboloid</i> . Submitted.	

Quilodrán, R. 2011. *On extremizing sequences for the adjoint restriction inequality on the cone*. Accepted for publication.

Christ, M. and Quilodrán, R. 2011. *Gaussians rarely extremize adjoint Fourier restriction inequalities for paraboloids*. Accepted for publication.

Quilodrán, R. 2010. *The joints problem in \mathbb{R}^n* . SIAM J. Discrete Math. Volume 23, Issue 4, pp. 2211-2213 (2010).

TALKS

April 26, 2011: *Existence of maximizers for a family of restriction theorems*. Student Harmonic Analysis and PDE Seminar. Berkeley, CA.

March 31 and April 7, 2011: *On the circular maximal theorem*. Student Harmonic Analysis Seminar. Berkeley, CA.

November 2, 2010 : *On Extremizers for the adjoint Fourier restriction inequalities for paraboloids*. Student Harmonic Analysis and PDE Seminar. Berkeley, CA.

May 13, 2010 : *The endpoint case of the multilinear Kakeya conjecture*. Student Harmonic Analysis and PDE Seminar. Berkeley, CA.

October 13, 2009 : *Differentiation theorems for sparse sets*. Student Harmonic Analysis and PDE Seminar. Berkeley, CA.

April 8, 2009 : *Existence of traveling waves in a lattice of particles: a variational approach*. Student Harmonic Analysis and PDE Seminar. Berkeley, CA.

COMPUTER SKILLS

- Programming: Java, Mathematica, \LaTeX .
- Operating Systems: Unix/Linux, Windows.

LANGUAGES

Spanish (native), English (fluent)