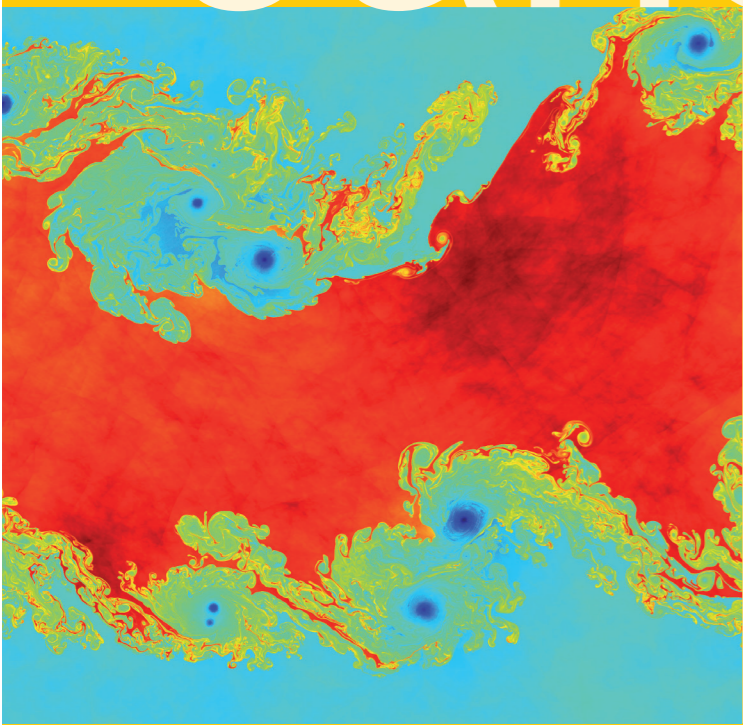


January - April 2019



Hausdorff Trimester Program Evolution of Interfaces

Organizers: Emanuele Spadaro, László Székelyhidi Jr., Georg Weiss

Interfaces arising as phase boundaries are ubiquitous in nature and are a rich source of mathematical problems. A major challenge is presented by the formation of singularities and in this respect phase-field approximations have played a key role in identifying selection principles and obtaining a well-defined evolution past singularities in the sharp interface limit. The purpose of the trimester program is to explore such problems, building on recent progress in higher co-dimensional minimal surface theory, the analysis of singularities in free boundary problems and on the discovery of h-principle phenomena induced by fluid instabilities.

The program will include a Winter School addressed to PhD students and postdocs and two major workshops:

- Winter School and Opening Workshop on the Evolution of Interfaces (January 7-11)
- Workshop on Geometric Measure Theory and Free Boundary Problems (February 11-15)
- Workshop on Interfaces and Instabilities in Fluid Dynamics (March 18-22)

Those planning to participate include:

John Andersson
Giovanni Alberti
Claude Bardos
Yann Brenier
Sagun Chanillo
Peter Constantin

Diego Cordoba
Daniel Faraco
Alessio Figalli
Camillo De Lellis
Stephan Luckhaus
Siddhartha Mishra

Felix Otto
Henrik Shahgholian
Steve Skholler
Yoshihiro Tonegawa
Tatiana Toro
Eugen Varvaruca



Call for participation: The Hausdorff Research Institute offers visiting positions for the whole period of the trimester program (for senior scientists, postdocs and PhD students). The deadline for applications is **April 15, 2018**. Please send applications (including CV and, for postdocs and PhD students, a letter of recommendation) using our online application form at www.him.uni-bonn.de/evolution-of-interfaces/. In addition numerous fellowships for shorter periods are available.