hausdorff center for mathematics



Course on Analysis and Computation of PDEs

We offer a lecture course in the summer term 2013 which capitalizes the strong interplay between the analytical and computational approaches to nonlinear PDE consisting of

V5B3 Analytical methods for thin elastic sheets and isoperimetric problems

Prof. Dr. Sergio Conti

Wed 12-14 SemR 1.008 MATH Th 12-14 SemR 1.007 MATH

V5E3 Numerical Methods for thin elastic sheets, shapes and isoperimetric problems

Prof. Dr. Martin Rumpf

Wed 10-12 SemR 2.040 MATH

Th 10-12 SemR 2.040 MATH

as a coordinated package.

Topics are

- Modeling, Analysis and Simulation of thin elastic sheets,
- Variational methods for shapes and isoperimetric problems.



The two courses are coordinated with the intention to show the strong interplay between the analytical and computational approaches. Of course, each of these courses will be self contained and can be followed independently. However, there will be a substantial gain following both courses in parallel. In addition we offer a practical lab in which corresponding numerical algorithms will be implemented.