News, September 2015

Joint project "Hydropower and geo-energy"
Prof. Domenico Giardini

Events

Presentation at the Euromech Colloquium 575, IMT Lucca, Italy, March 2015, on the " Influence of roughness on elastostatic friction for nearly incompressible solids"

Participation in the international partnership for Geothermal Tecchnology Reservoir Modeling Workgroup Meeting, April 26 – 28, 2015, Wellington New Zealand

Invited talk at the University of Trento, May 2015, on "Determination of real area of contact and elastostatic friction for self-affine surfaces by means of the Finite Element Method"

Presentation at the PASC 2015, ETH Zurich, June 2015 on "Prediction of Elastostatic Friction for Rock-Like Surfaces with FEM"

Presentation at the YIC GACM, RWTH Aachen, July 2015 on "Determination of real area of contact and elastostatic friction for self-affine surfaces by means of the finite element method"

Poster presentations "Modelling permeability and stimulation for deep heat mining", "Potential for future hydropower plants: A systematic analysis in the periglacial environment" and "Design optimization of alpine desanding facilities", SCCER-SOE conference, September 11 – 12, 2015.

Collaboration, new partnerships

Swiss Federal Office of Energy, project on „Bewertung der Kennzahlen und Nachhaltigkeit für eine tiefe Einloch-Geothermie Anlage"

Publications

Krause, R., Rigazzi, A., and Steiner, J.: A parallel multigrid method for constrained minimization problems and its application to friction, contact, and obstacle problems. Computing and Visualization in Science, 2015, to appear.

Varia

The research drilling on Grimsel Pass to investigate the properties of fracture-hosted geothermal systems is now underway.

Development and implementation of Utopia, a Domain Specific Language to wrap linear algebra libraries

Development and implementation of PASSO (Parallel Subspace Solver and Optimization), a solver library based on Utopia.