

SALZBURG MATHEMATICS COLLOQUIUM

Winter 2014/2015

Paolo Marcellini (Florence)

„Some explicit solutions to a system of implicit partial differential equations: rigid maps and origami“

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Abstract: A rigid map u is a Lipschitz-continuous map with the property that at every point where u is differentiable its gradient is an orthogonal matrix. We introduce Lipschitz-continuous local isometric immersions and propose an approach to the analytic theory of origami (i.e. piecewise C^1 rigid maps plus a condition which excludes self intersection). We characterize the singular set of u and use this characterization to explicitly solve a class of Dirichlet problems associated to some partial differential systems of implicit type. For more information see the extended abstract at the web page mentioned below.

Thursday, **15:15-16:00**
Seminarraum II, 1. Stock