UNIVERSITÀ DI PARMA

DIPARTIMENTO DI SCIENZE MATEMATICHE, FISICHE E INFORMATICHE

Notizie	SEMINARIO di Analisi Matematica	28 aprile 2017

Data: **mercoledì 17 maggio**, ore **16:30**

Luogo: Aula B, Plesso di Matematica

Relatore: **dott. Marcello Carioni**
Julius-Maximilians-Universität Würzburg

Titolo: **A coarea-type formula for the Mumford-Shah functional in dimension one**

Tutti gli interessati sono invitati a partecipare,

Proff. Alessandra Lunardi e Giampiero Palatucci

Abstract: *The Mumford-Shah functional is one of the most studied variational approach to image processing and edge detection. In the first part of the talk we present it and we focus on a suitable calibration technique for this functional, introduced by Alberti, Bouchitté and Dal Maso in 1999, showing how it can be used to prove that some candidate functions are minimizers. Then we deal with the opposite question: we ask if, given a minimizer, there always exists a calibration for it. In connection to this problem we introduce the convex lift of the Mumford-Shah to the space of rectifiable currents and we prove the existence of a coarea-type formula in dimension one (for finite linear combination of graphs), providing an answer to the previous question in the one dimensional case.*