Seminario di Matematica

Lunedì 16 novembre 2015
ore 14:00

Scuola Normale Superiore
Pisa
Aula Bianchi Scienze

Chinh Lu
(Centro De Giorgi)

Terrà un seminario dal titolo:

" Convexity of the extended Mabuchi energy and the large time behaviour of the weak Calabi flow"

Abstract:

Let X be a compact Kahler manifold. In this talk we first establish the convexity of the Mabuchi energy along finite energy geodesics in the competion of the space of Kahler metrics (the case of C^1,1 geodesics was proved by Berman-Berndtsson). Secondly, following the program of J. Streets we use this to study the asymptotics of the weak Calabi flow which is the gradient flow of the Mabuchi energy in the CAT(0) space of Kahler metrics. This flow exists for all times and coincide with the smooth one whenever the latter exists. We show that it either diverges or it converges, in the pluripotential sense, to some minimiser of the functional. This gives the first concrete result about the long time convergence of this flow on general Kahler manifolds, partially confirming a conjecture of Donaldson. This is joint work with Robert Berman and Tamas Darvas http://arxiv.org/abs/1510.01260.

Tutti gli interessati sono invitati a partecipare.

Classe di Scienze Matematiche e Naturali

11/11/2015