



SCUOLA
NORMALE
SUPERIORE

SEMINARIO DI MATEMATICA

Giovedì 21 marzo 2019

ore 16:00

Scuola Normale Superiore

Pisa

Aula Fermi

Gabriele Mondello

(Roma La Sapienza)

Terrà un seminario dal titolo:

“On moduli spaces of spherical surfaces with conical points”

Abstract:

Metrics of positive curvature with conical singularities on surfaces behave quite differently than flat or hyperbolic ones. In particular, existence and uniqueness of spherical (i.e. $K=1$) metrics in a given conformal class is not granted. The aim of the talk is to address a number of features of the moduli spaces of spherical metrics on compact oriented surfaces with conical singularities of prescribed angles. Among the global properties, we discuss non-emptiness and we show that such moduli spaces can have an arbitrarily large number of connected components. Furthermore, we show that no spherical metric in a given conformal class exists if one angle is too small. Such result relies on an explicit systole inequality which relates metric invariants (spherical systole) and conformal invariants (extremal systole) of spherical surfaces, and that can be of independent interest.

This is joint work with Dmitri Panov.

Tutti gli interessati sono invitati a partecipare.

Classe di Scienze