



UNIVERSITÀ DI PARMA

DIPARTIMENTO DI SCIENZE MATEMATICHE, FISICHE E INFORMATICHE

<http://smfi.unipr.it>

SEMINARIO

Relatore: Prof.ssa Anna Maria Fino, Università di Torino

Luogo: Sala delle Riunioni, Plesso di Matematica

Quando: Lunedì 20 Gennaio 2020, ore 16:30.

Titolo: Closed G_2 -structures

Tutti gli interessati sono invitati a partecipare.

Organizzatore: Prof. Adriano Tomassini

Abstract: G_2 -structures on 7-manifolds are defined by a closed positive 3-forms and constitute the starting point in various known and potential methods to obtain holonomy G_2 -metrics. Although linear, the closed condition for a G_2 -structure is very restrictive, and no general results on the existence of closed G_2 -structures on compact 7-manifolds are known.

In the seminar I will review known examples of compact 7-manifolds admitting a closed G_2 -structure. Moreover, I will discuss some results on the behaviour of the Laplacian G_2 -flow starting from a closed G_2 -structure whose induced metric satisfies suitable extra conditions.