



SCUOLA
NORMALE
SUPERIORE

SEMINARIO DI MATEMATICA

Martedì 29 maggio 2018
ore 14:00

Scuola Normale Superiore
Pisa
Aula Tonelli

Francesca De Marchis

(*Università Roma La Sapienza*)

terrà un seminario dal titolo:

**“Uniqueness and existence results via Morse index for
Lane Emden problems”**

Abstract:

We consider the classical Lane Emden equation in bounded domains of the plane with Dirichlet boundary conditions and we present some results concerning the Morse index of solutions to this problem, when the exponent of the nonlinearity is large. Via these Morse index computations and a precise asymptotic analysis we can deduce a uniqueness result for positive solutions in convex domains and also some existence results of non-radial sign-changing solutions in the ball. Based on joint papers with M. Grossi, I. Ianni and F. Pacella.

Tutti gli interessati sono invitati a partecipare.

Classe di Scienze