

## SEMINARI DI SISTEMI DINAMICI OLOMORFI

Giovedì 28 novembre 2013 ore 14:30- 15:30

Scuola Normale Superiore
Pisa
Sala Conferenze (Puteano, Centro De Giorgi)

## Izabela Petrykiewicz

(Institut Fourier - Grenoble)

Terrà un seminario dal titolo:

## "Hölder regularity of arithmetic Fourier series arising from Eisenstein series"

## **Abstract:**

In my talk I will present our recent results concerning local behaviour of certain Fourier series, which are related to Eisenstein series. In our analysis we apply wavelets methods proposed by Jaffard in 1996 in the study of the Riemann series, and we use the modularity (and quasimodularity) of Eisenstein series. We find that the Hölder regularity exponent at an irrational x is related to the continued fraction expansion of x, in a very precise way. Since modular forms can be expressed in terms of Eisenstein series, at the end of my talk I will also generalise our findings to a bigger class of series.

Tutti gli interessati sono invitati a partecipare.

Classe di Scienze

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