



SCUOLA  
NORMALE  
SUPERIORE

## SEMINARIO DI MATEMATICA

Martedì 27 ottobre 2015  
ore 16:00

Scuola Normale Superiore  
Pisa  
Aula Bianchi Scienze

**Blazej Wróbel**

*Università di Milano Bicocca e University of Wrocław*

Terrà un seminario dal titolo:

### **“Bilinear multipliers from the perspective of a joint functional calculus”**

**Abstract:**

*Even though the Laplacian does not satisfy the Leibniz rule, it does satisfy a fractional Leibniz rule in terms of  $L_p$  estimates. This can be proved by using the Coifman-Meyer theory of bilinear Fourier multipliers. Noting that the bilinear multipliers may be defined in terms of a joint functional calculus for partial derivatives, we propose a spectral generalization of the theory outside of the Fourier transform framework. We focus on Coifman-Meyer type multiplier theorems and their relations with fractional Leibniz rules. Examples admitted by our theory include bilinear multipliers for: the discrete Laplacian, the general Dunkl Laplacian, and the Jacobi operator. The talk is mostly based on work in progress.*

Tutti gli interessati sono invitati a partecipare.

Classe di Scienze Matematiche Naturali