



SCUOLA  
NORMALE  
SUPERIORE

## SEMINARIO DI MATEMATICA

**Mercoledì 09 gennaio 2013**

Ore 15.00

Scuola Normale Superiore

Pisa

Aula 2 (Palazzo Carovana)

**Alessio Martini**

*Università di Kiel, Germania*

Terrà un seminario dal titolo:

**“Spectral multipliers on the free group  $N_{3,2}$ ”**

**Abstract:**

*Let  $L$  be a homogeneous sublaplacian on a stratified Lie group  $G$  of homogeneous dimension  $Q$  and topological dimension  $d$ .*

*By a theorem of Mihlin-Hörmander type due to Christ and to Mauceri and Meda, an operator of the form  $F(L)$  is of weak type  $(1,1)$  and bounded on  $L^p(G)$  for  $1 < p < \infty$  if the function  $F$  satisfies a scale-invariant smoothness condition of order  $s > Q/2$ .*

*In joint work with Detlef Müller, we show that for some 2-step groups, including the free group  $N_{3,2}$ , the above smoothness condition can be pushed down to  $s > d/2$ .*

Tutti gli interessati sono invitati a partecipare.

Classe di Scienze