



SCUOLA  
NORMALE  
SUPERIORE

## SEMINARIO DI MATEMATICA

Lunedì 14 maggio 2018  
ore 11:00

Scuola Normale Superiore  
Pisa  
Aula Marie Curie

**David Bate**  
(*Jyvaskyla University*)

terrà un seminario dal titolo:

**“The Besicovitch-Federer projection theorem is false  
in every infinite dimensional Banach space”**

**Abstract:**

*The Besicovitch-Federer projection theorem is a fundamental result of classical geometric measure theory and it is natural to ask if generalisations exist outside of the Euclidean setting. We will demonstrate its failure in Hilbert space by constructing a purely unrectifiable set of finite  $\mathcal{H}^1$  measure whose image under every (non-zero) continuous linear function has positive Lebesgue measure. Time permitting, I will discuss how the counter example may be generalised to any infinite dimensional separable Banach space. This is joint work with Marianna Csörnyei and Bobby Wilson.*

Tutti gli interessati sono invitati a partecipare.

Classe di Scienze Matematiche e Naturali