



SCUOLA  
NORMALE  
SUPERIORE

## SEMINARIO DI MATEMATICA

Mercoledì 4 febbraio 2015  
ore 17:00

Scuola Normale Superiore  
Pisa  
Aula Campana

**Ignacio Zurrian**

*Universidad Nacional de Córdoba, Argentina*

Terrà un seminario dal titolo:

### **“Matrix Valued Spherical Functions, Matrix Orthogonal Polynomials and Time and Band Limiting for Matrix Functions”**

**Abstract:**

*We will introduce the general notion of matrix valued spherical functions and matrix valued orthogonal polynomials, together with the results obtained for the pairs  $(SO(n+1), SO(n))$ . We will also talk about the algebra of matrix differential operators associated to a matrix weight. Finally, we will show the extension of a result, that traces its origin and its importance to work of Claude Shannon in laying the mathematical foundations of information theory and to a remarkable series of papers by D. Slepian, H. Landau and H. Pollak, to a situation involving matrix valued orthogonal polynomials and spherical functions.*

Tutti gli interessati sono invitati a partecipare.

Classe di Scienze Matematiche e Naturali