



SCUOLA
NORMALE
SUPERIORE

SEMINARIO DI MATEMATICA

Lunedì 23 gennaio 2012

Ore 16.00

Scuola Normale Superiore

Pisa

Aula 2

Sanjiv Kumar Gupta

University of Muscat

Terrà un seminario dal titolo:

“The smoothness of convolutions of zonal measures on symmetric spaces”

Abstract:

Suppose G is a compact, simple Lie group with Cartan involution θ and K is the compact subgroup of G fixed by θ . Then G/K is a compact symmetric space. Dunkl proved that the convolution of the surface measure of the sphere in \mathbb{R}^n with itself is absolutely continuous with respect to Lebesgue measure on \mathbb{R}^n . Generalizing this, Ragozin proved that if $\mu_1, \dots, \mu_{\dim(G/K)}$ are any K -bi-invariant continuous measures on G , then $\mu_1 * \dots * \mu_{\dim(G/K)}$ is absolutely continuous with respect to the Haar measure on G . In this talk, it will be shown that if $r = \text{rank}(G/K)$, and μ_1, \dots, μ_{2r+1} are any K -bi-invariant continuous measures on G , then $\mu_1 * \dots * \mu_{2r+1}$ is absolutely continuous with respect to the Haar measure on G . I will also talk on some related results about noncompact symmetric space and about other K -invariant measures. This is joint work with Kathryn Hare.

Tutti gli interessati sono invitati a partecipare.

Classe di Scienze