COLLOQUIO DE GIORGI

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"Eigenvalue statistics and lattice points"

One of the more challenging problems in spectral theory and mathematical physics today is to understand the statistical distribution of eigenvalues of the Laplacian on a compact manifold.

There are now several challenging conjectures about these, originating in the physics literature.

I will describe what is conjectured and what is known the very simple case of the flat torus, where the problems amount to counting lattice points in annuli and have a definite arithmetic flavour.

Martedì 9 maggio 2006
ore 17.00
Aula Mancini
Piazza dei Cavalieri, 7
PISA