



SCUOLA
NORMALE
SUPERIORE

SEMINARIO DI MATEMATICA

Martedì 27 novembre 2018
ore 11:00

Scuola Normale Superiore
Pisa
Aula Bianchi Scienze

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(Lund University)

Terrà un seminario dal titolo:

“Perturbation theory for the spectral decomposition of matrices”

Abstract:

Consider a Hermitian matrix and a small perturbation. We will consider how the eigenvalues and eigenvectors change with the perturbation. Typical theorems concerning this either consider a perturbation along a line or provide general estimates valid for all perturbations (such as Weyl's inequalities). We first give an overview of the field and then provide new results which are global in the sense that the perturbation is not restricted to a line, but local in the sense that the estimates are valid modulo certain ordo terms.

We apply this to the functional calculus of the matrix square root and matrix modulus. In the kernel-free case the corresponding result follows from the so called Daleskii-Krein theorem.

Tutti gli interessati sono invitati a partecipare.

Classe di Scienze