U LISBOA | UNIVERSIDADE DE LISBOA

Seminário CEAFEL*

29 Julho – 14:00 - sala 6.2.33

Symplectic eigenvalues of positive definite matrices

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Abstract:

For every positive definite matrix of order 2n, there exist n positive numbers associated to it. These numbers are called the symplectic eigenvalues of the matrix, and are important in different areas such as classical (Hamiltonian) mechanics, quantum information and symplectic topology. Recently there has been a heightened interest in the study of symplectic eigenvalues both by mathematicians and physicists due to their extensive applications in quantum information. In this talk, we discuss some fundamental inequalities and variational principles involving symplectic eigenvalues, perturbation theorems and relationship between symplectic eigenvalues and ordinary eigenvalues.

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