

Traces of Matrix Powers and Symmetric Polynomials

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I will consider the problem of characterizing inequalities satisfied by traces of powers of a real symmetric matrix A . I will focus on inequalities that are satisfied by symmetric matrices of all sizes. While we can describe inequalities satisfied by all matrices, the case of 0/1 matrices seems to be much more complicated, and is of interest in graph theory. Joint work with Jose Acevedo, Daniel Brosch, Sebastian Debus, Annie Raymond and Cordian Riener.