

# Discrete Mathematics Seminar

Illinois State University

2:00–2:50 pm, February 9

Speaker: Aida Abiad, Eindhoven University of Technology

## Eigenvalue bounds for the independence and chromatic number of graph powers

In this talk I will present several eigenvalue bounds on the independence number and the distance chromatic number of graph powers. We will see how to use polynomials and mixed-integer linear programming in order to optimize such bounds. Some infinite families of graphs for which the new bounds are tight will also be shown.

