## YURI FAENZA, Columbia University

An invitation to 2-level polytopes

2-level polytopes are a generalization of stable set polytopes of perfect graphs. They naturally appear in several areas of mathematics, including polyhedral combinatorics, combinatorial optimization, and statistics. Those polytopes have received some attention in the last years because of their connections with the theory of linear and semidefinite extended formulations and the log rank conjecture in communication complexity. Still, even basic questions on their structure lie unanswered. In this talk, I will present some known results, open problems, and promising research directions. In particular, I will focus on an algorithm for enumerating, up to affine transformations, all 2-level polytopes.