Berlin Mathematical School

BMS Friday Colloquium

Benjamin Sudakov
(ETH Zurich)

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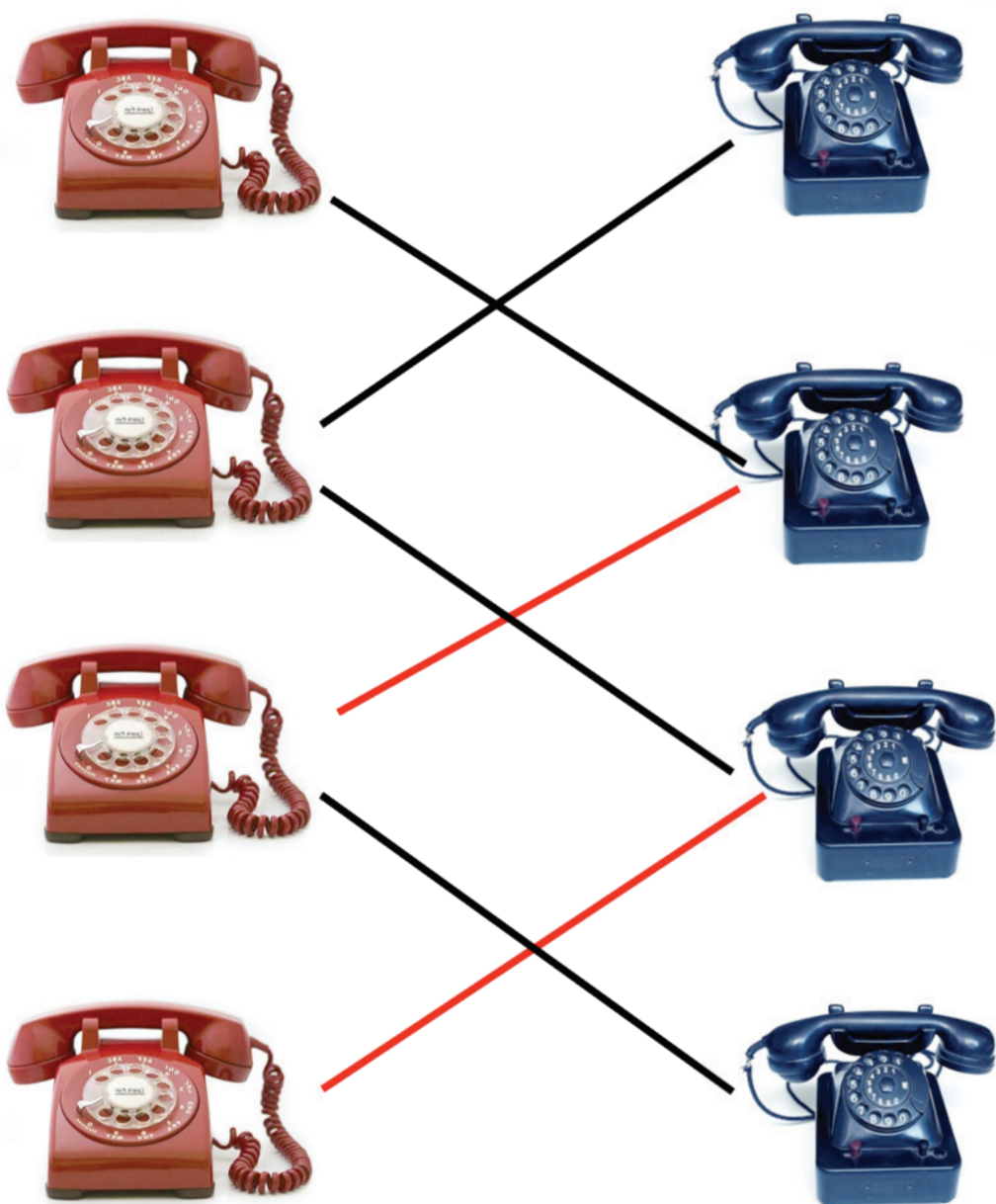
Induced matchings, arithmetic progressions and communication

Extremal combinatorics is one of the central branches of discrete mathematics that deals with the problem of estimating the maximum possible size of a combinatorial structure which satisfies certain restrictions. Often, such problems also have applications to other areas including theoretical computer science, additive number theory and information theory. In his talk, Sudakov will illustrate this fact using several closely related examples that focus on a recent work with Alon and Moitra.

Benny Sudakov received his PhD from Tel Aviv University in 1999. He had appointments in Princeton University, the Institute for Advanced Studies and in UCLA, and is currently professor of mathematics in ETH, Zurich. He is the recipient of an Alfred P. Sloan Fellowship, NSF CAREER Award, Humboldt Research Award and was invited speaker at the 2010 International Congress of Mathematicians. His main research interests are combinatorics and its applications to other areas of mathematics and computer science.

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