

DISCRETE MATHEMATICS SEMINAR

Speaker: Miklós Bóna
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Date: Monday, November 6, 2023

Time: 3:30 PM

Location: 229 Hayes-Healy Bldg

Lecture Title:

Unimodality, Log-concavity, and Real Zeroes --- Results and Open problems

Abstract

We will start by a survey of the three properties of sequences mentioned in the title. Then we will discuss a series of interesting results, each of which leads to intriguing open problems. The subjects of our enumeration results will be very diverse, and they will include a large family of questions motivated by evolutionary biology, the longest increasing subsequence of permutations, t-stack sortable permutations, parking functions, ranks of vertices in rooted trees, generalized descents of permutations, and Standard Young Tableaux. Some of the conjectures relate to long-standing open problems and they seem to be "obviously true".