Analysis Seminar

Generating Tree Method

By

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Abstract: Walks on lattices, permutations, and integer sequences have rich combinatorial structures. They are also used in statistical physics and biology to model many natural phenomena. These combinatorial structures become surprisingly more interesting when we study them under some restrictions, such as self-avoidance conditions for walks or pattern-avoidance requirements for permutations and sequences. There are many challenging probability and combinatorics questions related to these models.

When combined with the kernel method, the generating tree method is a powerful tool for solving many enumeration questions for such models. I will present the method and show applications to questions from elementary to advanced levels.

Date: Tuesday, October 25, 2022
Time: 16:00-17:00
Place: SA141 Mathematics Seminar Room