Seminar on Combinatorial Computing
September 13, Wednesday, 6:30 p.m.
Room 8404, Graduate Center
365 Fifth Avenue, New York

Minimizer graphs for a class of extremal problems

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Abstract

We consider the family of graphs with a fixed number of vertices and edges. Among all these graphs, we are looking for those minimizing the sum of the square roots of the vertex degrees. We prove that there is a unique such graph, which consists of the largest possible complete subgraph plus only one other non-isolated vertex. The same result is proven for any power of the vertex-degrees less than one half. (Joint work with Dan Stefanica.)

For further information contact Janos Pach at pach@cims.nyu.edu,
or visit our website: http://math.gc.cuny.edu/Seminars/Combinatorics.html