



On the logarithmic calculus and Sidorenko's conjecture

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We study a type of calculus for proving inequalities between subgraph densities which is based on Jensen's inequality for the logarithmic function. As a demonstration of the method we verify the conjecture of Erdős-Simonovits and Sidorenko for new families of graphs. In particular we give a short analytic proof for a result by Conlon, Fox and Sudakov. Using this, we prove the forcing conjecture for bipartite graphs in which one vertex is complete to the other side.

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