

Stability, hyperlinearity and soficity of amenable groups

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I will discuss hyperlinear approximations of amenable and ideas on how to show that such approximation is essentially produced from a sofic approximation. The proof is probabilistic, using the concentration of measure in high dimensional spheres to control the deviation of an operator's matrix coefficients from its trace. As a corollary, I will connect stability of sofic approximations with stability of hyperlinear approximations.

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