

Embeddings of groups into Hilbert space and speed of random walks

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Abstract: I will describe joint work with Assaf Naor that relates the compression exponents for embedding groups into Hilbert space, to the rate of escape of random walks on those groups.

In embedding wreath products, a traveling salesman estimate appears; and when the target space is L^p rather than Hilbert space, we need to consider certain walks with stable increments rather than simple random walk.