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# Talk

**Speaker:** Vladislav Kargin.

**Affiliation:** Courant Institute.

**Title:** *On Norms of Products of Free Random Variables.*

**Time and Place:** Thursday, November 30, 3:00-3:55pm, Milner 317.

**Abstract:** Let  $X_i$  denote free identically-distributed operators. In the case when  $X_i$  are self-adjoint and positive, I consider the corresponding spectral probability distribution  $m(dx)$  and describe how the support of  $n$ -time free multiplicative convolutions of measure  $m(dx)$  with itself behaves as  $n$  approaches infinity. This result also describes the growth in the norm of the so-called symmetric products of operators  $X_i$ .

In the general case of non-necessarily self-adjoint  $X_i$  I describe how the norm of products  $X_1X_2\dots X_n$  behaves as  $n$  approaches infinity. I compare these results with analogous results about products of random matrices.

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Please send comments about this page to Michael Anshelevich.