

Department of Mathematics, BGU

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# BGU Probability and Ergodic Theory (PET) seminar

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*On Thursday, November ,1 2018*

*At 11:00 – 12:00*

*In 101-*

J.C. Saunders (Ben-Gurion University)

will talk about

## **Sieve Methods in Random Graph Theory**

Abstract: We apply the Turán sieve and the simple sieve developed by Ram Murty and Yu-Ru Liu to study problems in random graph theory. More specifically, we obtain bounds on the probability of a graph having diameter 2 (or diameter 3 in the case of bipartite graphs). An interesting feature revealed in these results is that the Turán sieve and the simple sieve “almost completely” complement to each other. This is joint work with Yu-Ru Liu.