

---

**HAMED HATAMI**, McGill University

*The entropy of random-free graphons and properties*

Every graphon defines a random graph on any given number  $n$  of vertices. It was known that the graphon is random-free if and only if the entropy of this random graph is subquadratic. I will prove that for random-free graphons, this entropy can grow as fast as any subquadratic function. However, if the graphon belongs to the closure of a random-free graph property, then the entropy is  $O(n \log n)$ . This is based on a joint work with Sergey Norine.