

## Combinatorics and Probability Seminar

*On the Zarankiewicz problem for graphs with bounded VC-dimension*

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**Abstract:** The problem of Zarankiewicz asks for the maximum number of edges in a bipartite graph on vertices which does not contain the complete bipartite graph  $K_{k,k}$  as a subgraph. In this talk, we will present some new phenomena related to an important variant of this problem, which is the analogous question in bipartite graphs with VC-dimension at most  $d$ , where  $d$  is a fixed integer such that  $k \geq d \geq 2$ . Several connections with incidence geometry will also be discussed. Joint work with Oliver Janzer (ETH).

*Note the unusual date*

Friday, November 19 at 2:00 PM in 636 SEO