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

The problem of Zarankiewicz asks for the maximum number of edges in a bipartite graph on  $n$  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.