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**Vladimir Nikiforov\***, vnikifrv@memphis.edu. *New bounds in the Zarankiewicz problem.* Preliminary report.

Given positive integers  $m, n, s, t$ , let  $z(m, n, s, t)$  be the maximum number of ones in a  $(0,1)$ -matrix of size  $m$ -by- $n$  that does not contain an all ones submatrix of size  $s$ -by- $t$ . A generic bound on  $z(m, n, s, t)$  is given that implies the known bounds of Kövari, Sós and Turán, and of Füredi. As a consequence, the best upper bound on the spectral radius of the adjacency matrix of a graph of order  $n$  with no complete bipartite  $s$ -by- $t$  subgraph is obtained.

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