Seminar on Combinatorial Computing
October 5, Wednesday, 6:30 p.m.
Room 6417, Graduate Center
365 Fifth Avenue, New York

# On the Combinatorial Complexity of Constrained VC-Classes

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**Abstract**

Let $[n] = \{1, \ldots, n\}$. Let $H$ be a class of binary functions $h : [n] \to \{0, 1\}$ with Vapnik-Chervonenkis dimension $\mathrm{VC}(H) = d$. I consider subclasses of $H$ which convey information about some unknown target $t$ in $H$. The classes are sample-dependent and the information may be used by a learning algorithm to approximate $t$. I report on some preliminary results on the growth of such classes.

For further information contact Janos Pach at pach@cims.nyu.edu, or visit our website
http://www.math.nyu.edu/p̃ach/public_html/combinatorics_seminar.html