L. Sunil Chandran (sunil@csa.iisc.ernet.in), Dept. of Computer Science and Automation, Indian Institute of Science, Bangalore, India, A. V. Kostochka* (kostochk@math.uiuc.edu), University of Illinois at Urbana-Champaign, 1409 W. Green St., Dept. of Mathematics, Urbana, IL 61801, and J. Krishnam Raju (krjampan@cs.uwaterloo.ca), David R. Cheriton School of Computer Science, University of Waterloo, Waterloo, Ontario, Canada. Hadwiger number of Cartesian products of graphs. Preliminary report.
The Hadwiger number $\eta(G)$ of a graph $G$ is the largest integer $n$ for which the complete graph $K_{n}$ on $n$ vertices is a minor of $G$. The main result of the talk says that the Hadwiger number of the Cartesian product $G_{1} \square G_{2}$ of graphs $G_{1}$ with $\eta\left(G_{1}\right)=m$ and $G_{2}$ with $\eta\left(G_{2}\right)=h$ is at least $m \sqrt{h}(1-o(h))$. The bound is asymptotically best possible when $m \geq h$. One of the corollaries is that the Hadwiger Conjecture holds for the Cartesian square of every graph. (Received January 15, 2008)

