

COMBINATORICS  
SEMINAR

*The fractional version of Hedetniemi's Product Conjecture*

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**Abstract:** Hedetniemi's Product Conjecture – that the chromatic number of the categorical product of  $n$ -chromatic graphs is  $n$ -chromatic – was made in 1967 and remains open. The fractional version of this has recently been proved by Xuding Zhu. We would like to present this, beginning with an introduction to fractional parameters and past work on the conjecture and related problems. We will also show how Zhu's result settles a conjecture of Burr, Erdos and Lovasz on chromatic Ramsey numbers.

It will likely take a few presentations to get through the background material and Zhu's proof, so this will be the first of a series of seminars on this topic.

Friday, January 28, 2011, 4:00 pm  
Mathematics and Science Center: W306

MATHEMATICS AND COMPUTER SCIENCE  
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