



# Berlin Mathematical School

## BMS Friday Colloquium

Friday, February 8, 2008, 2:00 pm

*Tea before the lecture starts at 1 pm*

BMS Loft, **Urania**

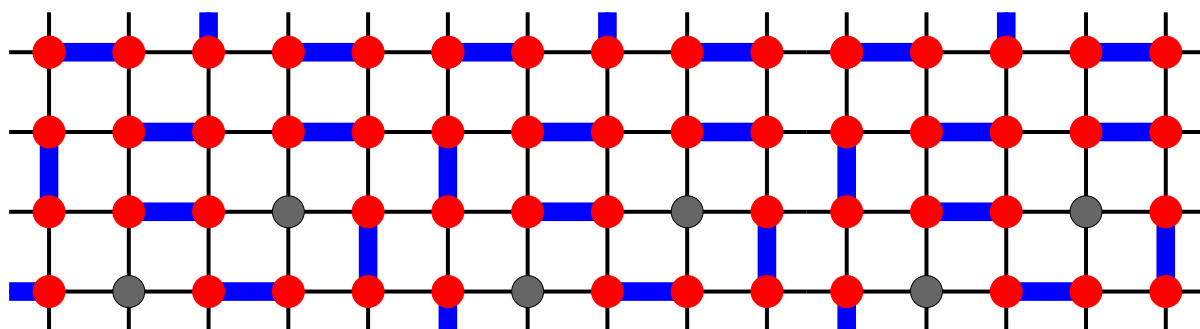
An der Urania 17, 10787 Berlin

Shmuel Friedland (Chicago/Berlin):

### “Counting matchings in graphs, with applications to the monomer-dimer models”

Meet the BMS Professor Shmuel Friedland—a pretty universal mathematician. His research covers complex variables, algebra, numerical analysis, number theory, combinatorics and graph theory, matrix theory, invariant theory, stability theory, ergodic theory and dynamical systems. In all these areas he has made significant contributions to the solution of very hard problems.

His lecture concerns an innocent-looking counting problem that has been studied a lot, both in graph theory and in statistical physics: how to estimate from below, and from above, the number of matchings in a large graph, such as a grid.



<http://www.math-berlin.de>