

## Kenyon Awarded 2007 Loève Prize

The 2007 Line and Michel Loève International Prize in Probability is awarded to Richard Kenyon of the University of British Columbia. The prize, which carries a monetary award of \$30,000, will be presented at a ceremony in Berkeley in October 2007.

Richard Kenyon received his Ph.D. in 1990, advised by Bill Thurston at Princeton. His research has dealt with the interface between statistical mechanics, probability and discrete conformal geometry. His 1997 paper *Local statistics of lattice dimers* studies uniform random dimer configurations (domino tilings) on a graph and shows how to perform many interesting calculations. This has become regarded as the seminal work in the subsequent emergence of a large field studying Gibbs distributions of combinatorial configurations, which has developed in unexpected directions. For instance:

(i) His 2000 paper *Conformal invariance of domino tiling* proves that the height function of a random domino tiling of the two-dimensional lattice has a distribution which, in the scaling limit, is conformally invariant.

(ii) His 2006 paper *Dimers and amoebae* (with Andrei Okounkov and Scott Sheffield) associates to any periodic bipartite planar graph a curve which can be used to describe the phase space of Gibbs distributions on dimer configurations and categorize them as gaseous, liquid or frozen.

Other aspects of this field involve spanning trees, matchings, the Gaussian free field, Harnack curves and various models for random surfaces.

**About the Prize.** The Prize commemorates Michel Loève, Professor at the University of California, Berkeley, from 1948 until his untimely death in 1979. The Prize was established by his widow, Line, shortly before her death in 1992. Awarded every two years, it is intended to recognize outstanding contributions by researchers in probability who are under 45 years old.