

Department of Applied Mathematics and Statistics  
The Johns Hopkins University

SEMINAR

Gregory F. Lawler  
Department of Mathematics  
Cornell University

**Friday**, April 1, 2005  
304 Whitehead Hall  
Refreshments: **10:30 a.m.**  
in 301 Whitehead Hall  
Seminar: **11:00 a.m.**  
in 304 Whitehead Hall

CONFORMAL INVARIANCE, BROWNIAN LOOPS,  
AND MEASURES ON RANDOM PATHS

ABSTRACT

There has been considerable progress in the last five years in understanding scaling limits of random lattice paths in two dimensions. I will review some of this work and then discuss some of the important open questions in this area. I will also discuss the following question: What is the analogue of the Schramm–Loewner evolution (the major new tool for understanding two-dimensional path measures in simply connected domains) in non-simply connected domains and in three dimensions?