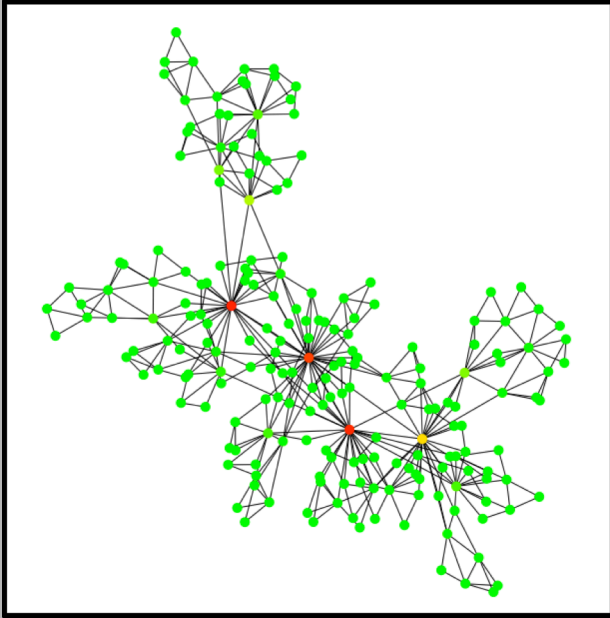


UCCS Department of Mathematics
Math Colloquium Series

DR. STEVEN LALLEY
UNIVERSITY OF CHICAGO



DATE:

OCTOBER 17, 2019

TIME:

12:30PM-1:30PM

(REFRESHMENTS AT 12:15PM)

LOCATION:

UNIVERSITY CENTER
ROOM #309

**Return Probabilities of Random Walks on
Non-Amenable Groups**

Abstract: A fundamental theorem of Harry Kesten asserts that the return probabilities of a random walk on a non-amenable group must always decay exponentially with the number of steps. Is there always a sharp asymptotic formula for the return probabilities, analogous to the Local Limit Theorem for random walks on \mathbb{Z}^n ? If so, is the nature of the formula (in particular, the polynomial correction to the exponential factor) determined by the geometry of the group? We will review recent progress on these questions.

For More Information please contact the UCCS Math Department at
(719) 255-3311 www.uccs.edu/math