# Department of Mathematics and Computer Science 

Friday, October 7, 2016, 4:10 pm<br>COLLOQUIUM TALK<br>Speaker: Vadim Zharnitsky (UIUC)<br>Old Main 2231

## Cyclic evasion in the three and four bug problem


#### Abstract

: A simple proof that three bugs involved in the cyclic evasion converge to an equilateral triangle configuration will be presented. The approach relies on a Lyapunov-type function that makes use of an apparently new inequality for the triangle. We will also describe some recent work on the four bug problem.


