VCU Discrete Mathematics Seminar

Region crossing change for diagrams on surfaces

Dr Heather Russell University of Richmond

Wednesday, Mar. 22 1:00-1:50 4119 Harris Hall (conference room)



For knot diagrams on the sphere, region crossing change is an unknotting operation. This means that any diagram can be transformed to a diagram of the unknot via a finite sequence of region crossing changes. In joint work with Oliver Dasbach at Louisiana State University, we investigate the region crossing change operation for diagrams on arbitrary closed, orientable surfaces. In this talk, we will define region crossing change, develop the graph theoretic and linear algebraic tools for studying region crossing change, discuss our results for arbitrary surfaces, and look at some examples.

> For the DM seminar schedule, see: http://www.people.vcu.edu/~clarson/DM-seminar.html