1114-57-90   **Elizabeth Denne***, Mathematics Department, Washington & Lee University, Lexington, VA
24450. *Folded Ribbon Knots in the Plane.*

Knots and links are modeled as folded ribbons lying in the plane. The ribbonlength of a knot is the the length of a knot divided by the width of the ribbon around it. This problem is related to the ribbonlength of immersed ribbons in the plane, as well as to the ropelength of thick knots. In this talk we'll discuss the construction of folded ribbon knots, and give examples of folded ribbon knots and their ribbonlength. We'll also discuss the topology of folded ribbon knots, and the problem of minimizing ribbonlength for a given knot type - it turns out there are several good candidates for this notion. This is joint work with undergraduate students from Smith College and Washington & Lee University. (Received August 13, 2015)