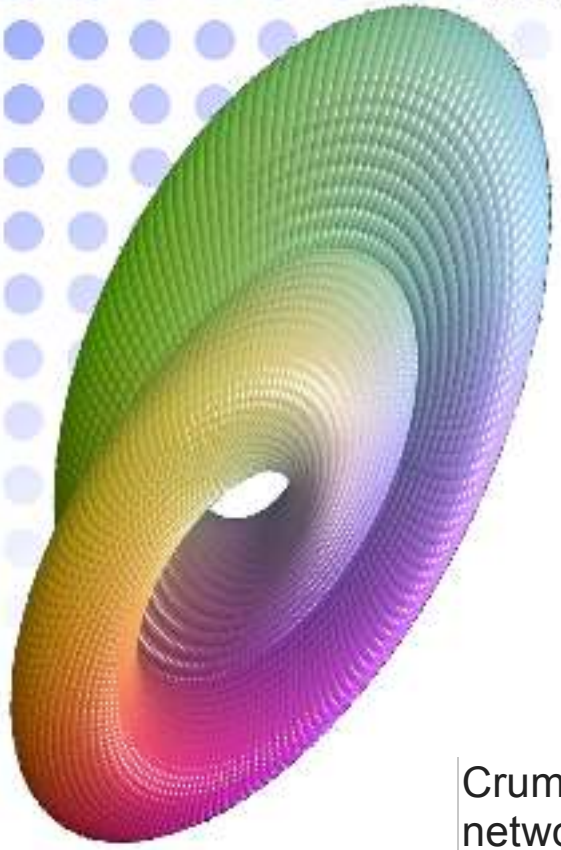
Michigan Math Club

Thursday at 4pm in the Nesbitt Room

Free Pizza and Pop



Wrinkles and Crumples and Origami, oh my!

Ian Tobasco

Abstract for 7 December

Crumple a sheet of paper and a seemingly unpredictable network of creases and folds appears. This talk will discuss the mathematical analysis of such “crumpling patterns”, their more orderly cousin origami, as well as other diffuse versions of crumpling known as “wrinkling patterns”. Along the way, we’ll learn the basics of elasticity theory, and see how tools from geometry, analysis, and mechanics can be used to predict and categorize the zoo of patterns exhibited by thin elastic sheets.