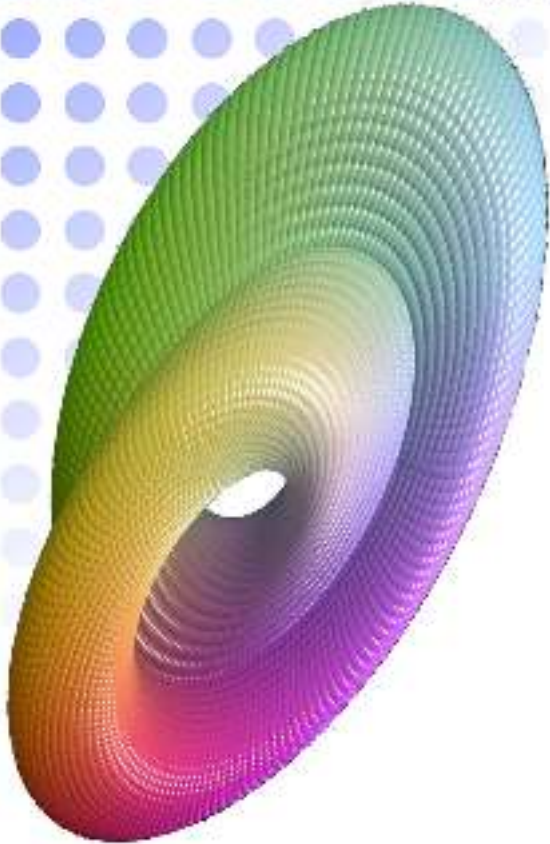


# Michigan Math Club

Thursday at 4pm in **East Hall 2851**  
(Nesbitt Room) Free Pizza and Pop



## The DNA Inequality

Paul Siegel

Penn State University

Abstract for 26 Jan. 2012



Imagine a (biological) cell with a strand of DNA wound up within its borders. The DNA inequality is the intuitive assertion that the DNA strand "curves more" than the boundary of the cell on average. I will give a slick proof of this inequality in the case where the boundary of the cell is a circle using Crofton's formula, one of the most beautiful and powerful tools in geometry. Time permitting, I will introduce some generalizations and open problems.