A MODEL OF DNA KNOTTING AND LINKING

ERICA FLAPAN

(Joint work with Dorothy Buck)

In this talk we describe a model of DNA knotting and linking. It follows from our model that all DNA products that are brought about by processive recombination or a single combination event starting with unknotted substrates fall into one of three families of knots and links which we have characterized. The argument that our model is correct uses knot theory together with biological justifications for certain simplifying assumptions.

POMONA COLLEGE