

Mathematical & Computational Biology Seminar

Organizer: Lior Pachter

Wednesday, 2:00–3:00pm, 939 Evans

Apr. 29 **Eva Strawbridge**, UC Davis
Mechanics and Structures of DNA

We model DNA as a Kirchhoff rod, making rigorous the foundations, scales, and assumptions behind the theory for this biological molecule. DNA experiences powerful torsional forces while held in constrained structures that, on the scales of a few hundred base pairs, can be viewed as linear. As such, the structures of DNA can be studied by analysis of a twisted rod under tension.