

# Very Tiny Knots in Nature

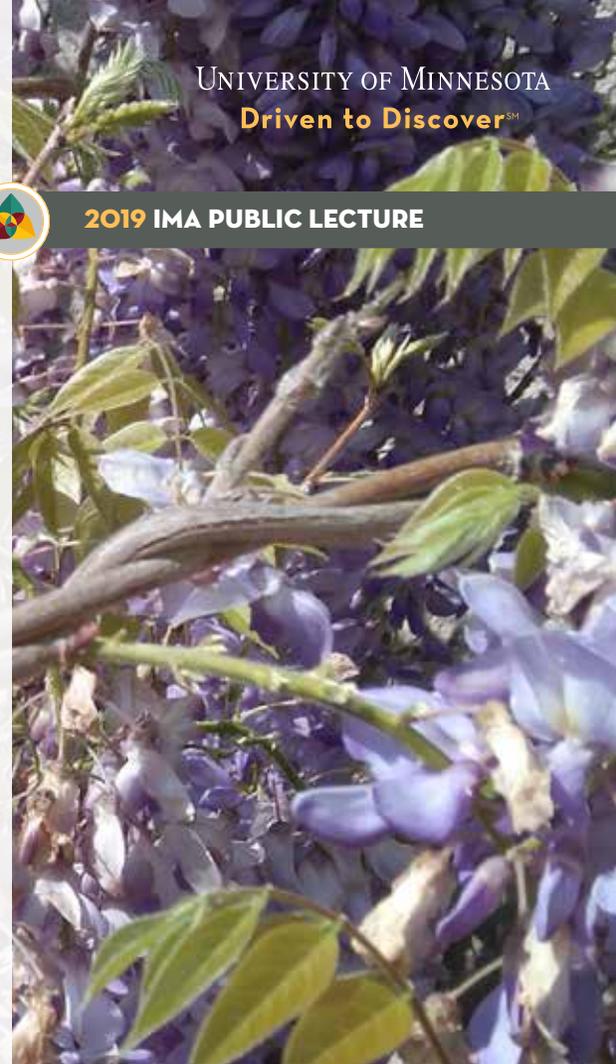
## MOLECULAR BIOLOGY MYSTERIES

**Kenneth C Millett**, University of California, Santa Barbara

Knotting and linking entanglement in living organisms are features that are visible to the careful observer of biological life. Since the 1970's, with the increasing power of electron microscopes, scientists have been able to capture images of such structures in living organisms at near atomic levels. We will explore what has been learned about these biomolecules and their consequences for life at the cellular level leading to new strategies to treat certain diseases such as cancers. We will discuss the mathematics of knotting and linking entanglement that has been at the center of the research. Naturally, researchers are now focused on new challenging questions and new scientific mysteries.

**Wednesday, June 26, 2019 / 7:00 p.m.**

Keller Hall, Room 3-180 - 200 Union St SE  
East Bank, University of Minnesota, Minneapolis





# Tiny Knots in Nature

## MOLECULAR BIOLOGY MYSTERIES



**Kenneth C. Millett, PhD** is a professor of mathematics at the University of California, Santa Barbara. His research concerns low-dimensional topology, knot theory, and the applications of knot theory to DNA structure.

Millett won the Carl B. Allendoerfer Award of the Mathematical Association of America in 1989 and the Chauvenet Prize in 1991 for a paper on knot theory with

W. B. R. Lickorish. He became a fellow of the American Association for the Advancement of Science in 2000. In 2012, he became one of the inaugural fellows of the American Mathematical Society.

*For more information: 612-624-6066 • [www.ima.umn.edu](http://www.ima.umn.edu)*

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