The Department of Mathematics and Statistics at Loyola University Chicago invites you to attend a talk in the Rataj Lecture Series in the Mathematical Sciences

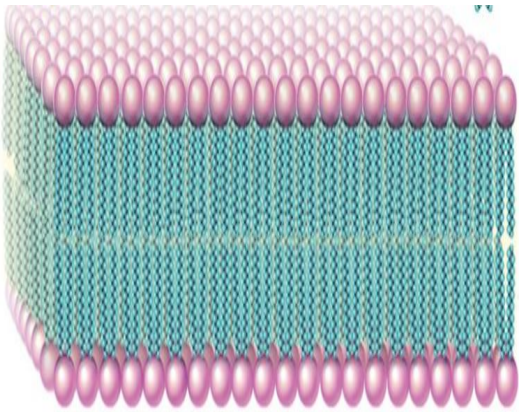
Modeling Lipid Bilayers

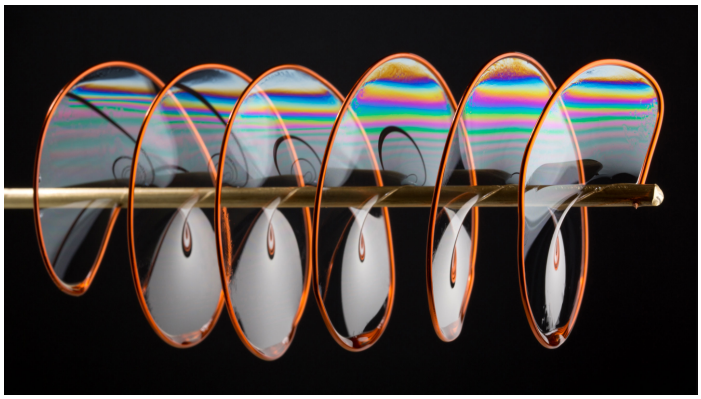
A combination of biology, mechanics, and geometry

Featuring Professor Brian Seguin

Professor of Mathematics, Loyola University Chicago

Lipid bilayers are thin membranes made from lipid molecules that form a continuous barrier around cells. Mathematics can help us understand the shape that these structures take and why spontaneous curvature is common in these bilayers. This can be modeled as a biological situation by imagining the lipid molecules as rigid rods and understanding the energy of their interactions. Along the way, I will introduce basic concepts from the differential geometry of surfaces.





Wednesday October 30th

IES 111, Lake Shore Campus

Tea: 4 - 4:30

Talk: 4:30 - 5:30

No mathematics beyond calculus, and no biological or mechanical background, will be assumed

For further information feel free to contact organizer Professor Emily Peters (epeters3@luc.edu)

We Hope to See You There!!!

LOYOLA UNIVERSITY CHICAGO

Preparing people to lead extraordinary lives