

National Institute for Theory and Mathematics in Biology

Funded by the U.S. National Science Foundation and the Simons Foundation



Northwestern
University



THE UNIVERSITY OF
CHICAGO

SIM **NS**
FOUNDATION

Understand the mathematical basis of constraints that drive biological capabilities

Capabilities



Constraints



Develop new mathematics inspired by biology



Get involved with the NITMB:

- External Research Projects
- Scientific Workshops
- Visiting Scholars
- NITMB MathBio Convergence Conference
- NITMB Fellows Program
- Summer Undergraduate Research
- Public Lectures



External Research Projects

- Each year NITMB solicits proposals for external research grants
- Eligibility: An active appointment at a U.S. academic institution
- 24 months and \$150k (direct + indirect)
- Funds can be used to support the stipend/salary/fringe of graduate and undergraduate research assistants and postdoctoral scholars
- No more than \$10,000 on experimental supplies and services or \$1,200 on travel (direct costs)
- Indirect cost rate limited to 20%
- *Applications in the Winter*

Visiting Scholars Program

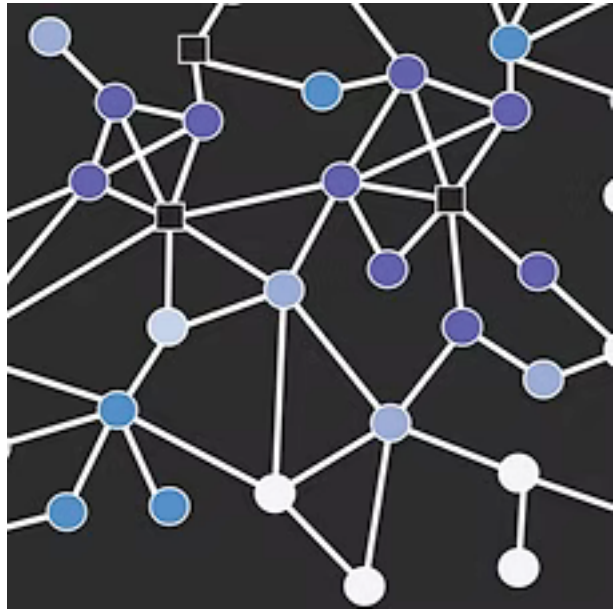
The NITMB can provide travel/housing expenses or a living stipend

- Long-term (from 10+ days to 6 month sabbatical stays)
- Concentrated research teams
- Post-workshop synthesis teams
- Visiting collaborations for trainees *(Rolling Applications)*

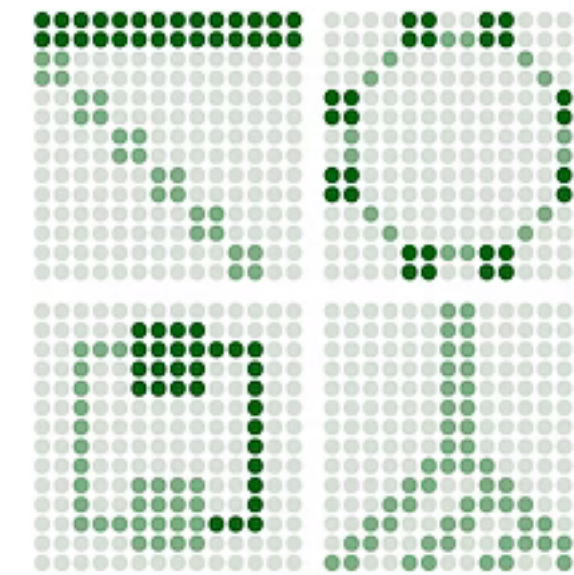
NITMB Affiliate Membership

- Regular, pre-approved participants in NITMB programs

Scientific Workshops



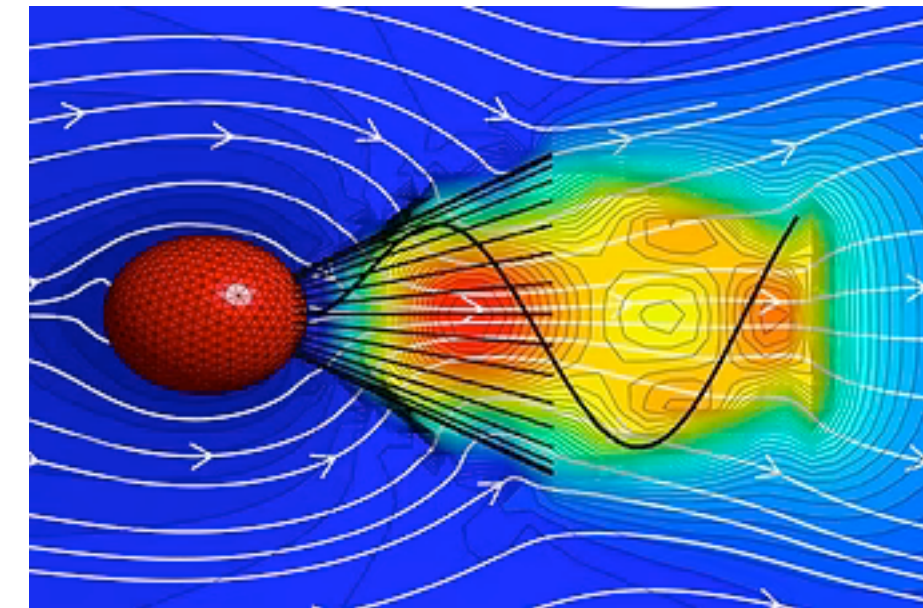
New Developments in the
Theory and Methodology of
Graph Neural Networks



Modeling and Theory in
Population Biology



Mathematics of the Origin
of Life and Self-Organized
Complexity



21-25 July 2025
Mathematical Modeling,
Computational Methods, and
Biological Fluid Dynamics:
Research and Training

Don't see one in your research area? **Propose a Workshop!**

(Rolling Applications)

NITMB Opportunities



National Institute for Theory and Mathematics in Biology
Funded by the U.S. National Science Foundation and the Simons Foundation

MathBio Convergence Conference — August 11-14

- 3 1/2 days, Monday - Thursday noon
- 6 plenary speakers
- 20 oral speaking slots (open submissions)
- 2 poster sessions (open submissions)
- Priority for early-career presenters
- Professional networking & career development activities
- Travel awards! (Including for PUIs/TIIs)
- At Drake Hotel next door to NITMB
(Auditorium limited to 150 attendees)



Organizing Committee:
Sharon Crook, Arizona State University
Adriana Dawes, Ohio State University
Bard Ermentrout, University of Pittsburgh
William Kath, Northwestern University
Ilaria Rebay, University of Chicago
Michael Rust, University of Chicago

NITMB Fellows Program

- Three-year independent postdoctoral fellowships for recent PhDs
- Not tied to a project; NITMB Fellows develop their own research plans
- Competitive salary
- Ample research and travel expense budget
- No teaching duties
(but teaching assignments are available upon request)
- *Applications in the Fall*



National Institute for Theory and Mathematics in Biology

Funded by the U.S. National Science Foundation and the Simons Foundation

PLEASE VISIT US!

nitmb.org