

NYU-Oxford Workshop on Mathematical Models of Defects and Patterns

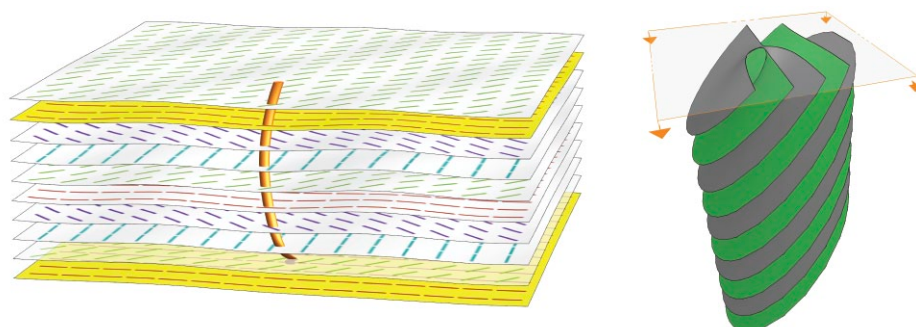
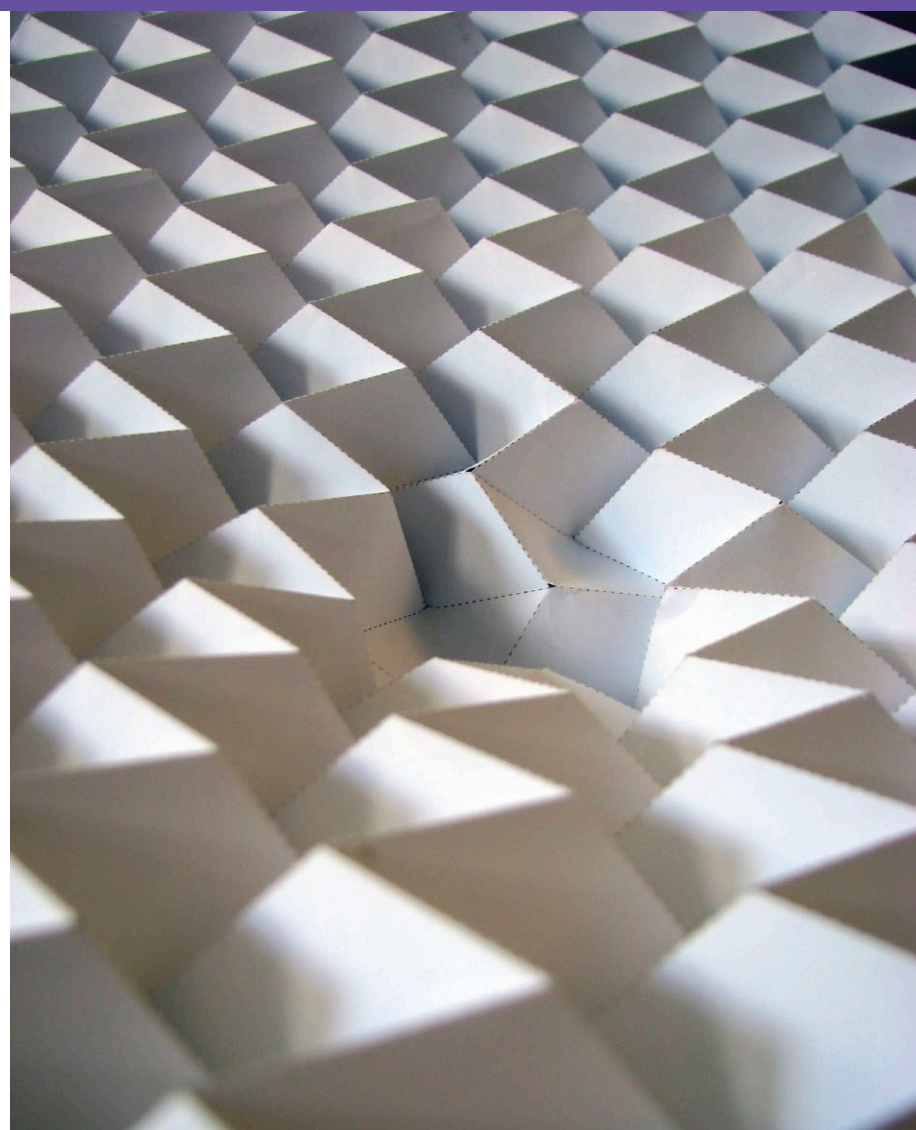
Courant Institute of Mathematical Sciences
New York University
January 5-8, 2016

Speakers

Xian Chen Hong Kong University of Science & Technology
Weinan E Princeton University
Sharon Glotzer University of Michigan
Alain Goriely University of Oxford
Yury Grabovsky Temple University
Miranda Holmes-Cerfon New York University
Randall Kamien University of Pennsylvania
Alain Karma Northeastern University
Emmanuelle Lacaze Université Pierre et Marie Curie
Xavier Lamy Max Planck Institute, Leipzig
Emanuel Lazar University of Pennsylvania
Robert MacPherson Institute for Advanced Study
Maria Giovanna Mora Università di Pavia
Massimiliano Morini Università di Parma
Cyrill Muratov New Jersey Institute of Technology
Ryan Murray Carnegie Mellon University
Celia Reina University of Pennsylvania
Pedro Reis Massachusetts Institute of Technology
Christian Santangelo University of Massachusetts, Amherst
Sylvia Serfaty Université Pierre et Marie Curie
Michael Shelley New York University
Tim Sluckin University of Southampton
Brian Spencer State University of New York, Buffalo
Dominic Vella University of Oxford
Epifanio Virga Università di Pavia
Arghir Zarnescu Univ. of Sussex and "Simion Stoilow" Institute
Pingwen Zhang Peking University

Organizers:

Robert V. Kohn New York University
John M. Ball University of Oxford
Giovanni Leoni Carnegie Mellon University
Peter Palffy-Muhoray Kent State University



Top: Origami mechanisms such as the Miura-ori can have their mechanical properties tuned by the introduction of localized misfolds known as "pop-through" defects. (Jesse Silverberg)

Lower left: Building pseudolayers by integrating up the torsion of the integral curves of the pitch axes in a cholesteric liquid crystal. (Daniel Beller)

Lower right: Level sets of surfaces can be used to study layered materials in one dimension lower. Here a tilted helicoid leads to a dislocation in a smectic liquid crystal. (Randall Kamien)

www.math.cmu.edu/PIRE/activities/workshop2016

This workshop is co-organized by the Courant Institute of Mathematical Sciences at NYU, and the Mathematical Institute at the University of Oxford. Major funding is provided by the NSF-funded PIRE project "Science at the Triple Point between Mathematics, Mechanics and Materials Science"

Limited funding is available to help early-career researchers attend the workshop.
The deadline to apply for support is November 1.



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