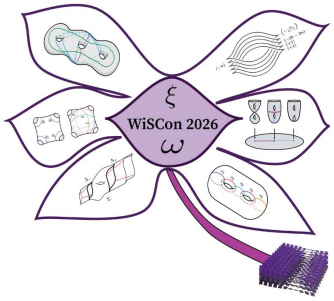
ipam institute for pure & applied mathematics

Research Collaboration Workshop in Contact and Symplectic Geometry/Topology (WiSCon)

AUGUST 24 - 28, 2026



Collective work of WiSCon 2026 organizers

Scientific Overview

The second WiSCon workshop is a research collaboration conference in the fields of symplectic and contact geometry/topology and related areas of low-dimensional topology. The goal of this workshop is to bring together researchers at various career stages in these mathematical areas to collaborate in small groups on projects designed and led by leaders in the field.

The mathematical fields of symplectic and contact geometry/topology, rooted in concepts from classical physics, have experienced substantial growth over the past several decades. This growth has taken many forms, including the development of multiple homology theories, advances in symplectic embedding problems, techniques for regularizing moduli spaces of pseudoholomorphic curves, and emerging connections to mirror symmetry, among others. This workshop aims to generate research collaborations that build on the momentum in these areas, while strengthening professional networks and contributing to the broader effort of broadening participation in geometric topology. In particular, the program emphasizes support for early-career researchers and scholars from groups historically underrepresented in symplectic and contact geometry and topology.

This week-long workshop builds on the successful inaugural WiSCon workshop by engaging researchers in in-depth discussions and hands-on problem-solving. Its format is modeled after the successful sequence of Association for Women in Mathematics (AWM) research network collaborations. Our primary aim is to cultivate new, long-lasting collaborations among researchers in this specialized field. Participants will range from advanced graduate students and postdoctoral scholars to senior faculty members and professional researchers.

We intend to leverage this one-week program as a focused platform for participants to convene in person, explore problems of mutual interest, exchange expertise, and build professional networks, thereby laying the foundation for sustained collaboration and research innovation. Successful applicants will be assigned to a research project based on their background and interests. Participants will form groups of four to six members, each led by two project leaders, and will work intensively on open problems drawn from the project descriptions. The collaborative structure is designed to promote mentorship, sustained interaction, and the development of long-term research partnerships.

Participation

Additional information about this workshop including application information can be found on the webpage listed below. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission, and we welcome their applications.

Organizers

Bahar Acu (Pitzer College)
Catherine Cannizzo (Columbia University)
Sierra Knavel (Georgia Institute of Technology)
Dusa McDuff (Barnard College)
Yu Pan (Tianjin University)

Research Projects and Leads

The fractional Dehn twist coefficients of braids
Project leaders:
Keiko Kawamuro (University of Iowa)
Diana Hubbard (Brooklyn College, CUNY)

Khovanov homology and symmetric unions
Project leaders:
Akram Alishahi (University of Georgia)
Kristen Hendricks (Rutgers)

Fukaya-Seidel categories
Project leaders:
Haniya Azam (LUMS, Pakistan)
Catherine Cannizzo (Columbia)

Hypersurfaces of generalized complex manifolds
Project leaders:
Aissa Wade (Pennsylvania State University)
Honglei Lang (Chinese Agricultural University)

Symplectic Geometry of Abelian Polygon Spaces in $\mathbb{R}^3$
Project leaders:
Leonor Godinho (Instituto Superior Técnico, Portugal)
Alessia Mandini (University of Verona, Italy)

Contact manifolds, fibered knots and Floer theory
Project leaders:
Katherine Raoux (University of Arkansas)
Linh Truong (University of Michigan)

NSF UCLA

For more information, visit the program webpage:
www.ipam.ucla.edu/wscon2026