OIST OKINAWA INSTITUTE OF SCIENCE AND TECHNOLOGY
沖縄科学技術大学院大学

VISITING PROGRAM

TSVP TALK

Knots in Contact 3-Manifolds

2025 TUE. **Aug. 05**

15:00–16:00

HYBRID L4E48, ZOOM

For zoom and other details scan QR code or visit oist.jp/visiting-program

Contact geometry has played a central role in the study of the topology of low-dimensional manifolds. A contact structure on an odd-dimensional manifold is a maximally non-integrable, non-vanishing hyperplane field. When the manifold has dimension three, there is a special class of knots called Legendrian knots. A knot is Legendrian if it is always tangent to the contact planes. In this talk, I will provide a brief introduction to contact 3-manifolds and the theory of Legendrian knots within them. Then, I will present recent progress and results concerning the classification of Legendrian knots. Warning: this talk contains an excessive number of knot diagrams—handle with curiosity!

Hacettepe University

Sinem Onaran

Sinem Onaran is a faculty member at Hacettepe University, Ankara-Turkey. She works in geometric topology, contact and symplectic topology. She is particularly working on problems related to Legendrian and transverse knots in contact geometry. She received her PhD in 2009 under the supervision of John Etnyre and Mustafa Korkmaz. She received the Young Scientist Award of the Turkish Academy of Sciences in 2016 and of the Science Academy in 2020 and she is also the author of the book Mathematical Mandala.

oist.jp/visiting-program

CONTACT Office of the Dean of Research tsvp@oist.jp