

Octav Cornea

Université de Montréal

**Thursday
April 17, 2025**

2:30 PM

**Live Stream
on Zoom**

**Viewing Party
CW 307.20
Math/Stat Lounge**



Complexity of Lagrangian submanifolds

Lagrangian submanifolds are a central object of study in symplectic topology. Their rigidity properties have been uncovered via Floer theory since the early '90's. The talk will briefly review the subject, in particular how triangulated category structures naturally arise in this context through work of Donaldson, Kontsevich, Fukaya, and others. Further, will be discussed the more recent, natural role of persistence theory, in the sense common in data science. Finally, we will outline how complexity measurements based on persistence methods reflect topological and dynamical invariants, such as topological entropy.

Register in Advance for Zoom Link at:

https://uregina-ca.zoom.us/meeting/register/Tmt2qf5sRS2hMu_70R56FA



Pacific Institute *for the*
Mathematical Sciences