

# BI-CO MATHEMATICS COLLOQUIUM

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*Institute for Advanced Study*

## ***“What is Symplectic geometry?”***

***Monday, February 27, 2023***

*Talk at 4:00 - Hilles 109*

*Tea at 3:30 – Foyer outside of Hilles 109*

### **Abstract:**

We will introduce symplectic vector spaces and symplectic manifolds, and discuss examples. Symplectic manifolds are even dimensional manifolds with a symplectic form, which is a nice generalization of an area form. We will then look at my favourite type of submanifold - Lagrangian submanifolds.

Then we will try to understand why symplectic geometry is interesting by discussing some history, and some statements of famous theorems and conjectures like Gromov Non-squeezing