

## **abstract**

Joint IAS-PU Symplectic Geometry Seminar  
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

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I'll discuss a bound on the length of the boundary of a J-holomorphic curve with Lagrangian boundary conditions by a constant times its area. The constant depends on the symplectic form, the almost complex structure, the Lagrangian boundary conditions and the genus. A similar result holds for the length of the real part of a real J-holomorphic curve. The infimum over J of the constant properly normalized gives an invariant of Lagrangian submanifolds. The invariant is  $2\pi$  for the Lagrangian submanifold  $\mathbb{R}P^n \subset \mathbb{C}P^n$ . The bound can also be applied to prove compactness of moduli of J-holomorphic curves to asymptotically exact targets. These results are joint work with Yoel Groman.