上海数学中心
SHANGHAI CENTER FOR
MATHEMATICAL SCIENCES

# VARIETIES OF GENERAL TYPE WITH DOUBLY EXPONENTIAL ASYMPTOTICS

## Speaker: Burt Totaro
### University of California, Los Angeles

**Time**：Thu, Nov. 11, 8:30-9:30

**Venue: Zoom Meeting 971 4102 0213, password: 200438**

**Abstract:** We construct smooth projective varieties of general type with the smallest known volume and others with the most known vanishing plurigenera in high dimensions. The optimal volume bound is expected to decay doubly exponentially with dimension, and our examples achieve this decay rate. We also consider the analogous questions for other types of varieties. For example, in every dimension we conjecture the terminal Fano variety of minimal volume, and the canonical Calabi-Yau variety of minimal volume. In each case, our examples exhibit doubly exponential behavior. (Joint work with Louis Esser and Chengxi Wang.)