



---

**Speaker:** Yang-Hui He  
City U. of London, Oxford U. and Nankai U.

Thursday, March 5, 2015  
4:00 PM  
229 Hayes-Healy Hall

**Title:** Gauge Theory & Calabi-Yau Spaces : Physics, Mathematics and Computation

**Abstract:**

The fruitful interaction between the physics of gauge theories and the mathematics of Calabi-Yau manifolds, especially in the context of string theory, has blossomed over the last 2 decades.

We will discuss a few aspects of how, with the aid of modern computational algebraic geometry, the gauge theory of particle physics has been harnessing the rich structure of Calabi-Yau spaces to construct worlds akin to ours and vice versa, how such explorations have lead to new mathematics.