

## **abstract**

SPECIAL LECTURE

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

---

Very recently, J.Y. Welschinger introduced a set of invariants for real varieties that give lower bounds on the number of real algebraic curves satisfying certain incidence relations.

After J. Solomon's homological interpretation, these invariants opened a new gate to reconsider the quantum cohomology of real varieties. In this talk, I will discuss Gromov-Witten-Welschinger (GWW) classes and their applications. In particular, Horava's definition of quantum cohomology of real algebraic varieties will be revisited and it will be (re)introduced as a DG-operad. In light of this study, I will speculate about mirror symmetry for real varieties.