

## Stable Pairs and Gopakumar-Vafa Invariants (5/5)

*vendredi 16 juillet 2021 15:00 (1 heure)*

In the first part of the course, I will give an overview of Donaldson-Thomas theory for Calabi-Yau threefold geometries, and its cohomological refinement. In the second part, I will explain a conjectural ansatz (from joint work with Y. Toda) for defining Gopakumar-Vafa invariants via moduli of one-dimensional sheaves, emphasizing some examples where we can understand how they relate to curve-counting via stable pairs. If time permits, I will discuss some recent work on  $\chi$ -independence phenomena in this setting (joint with J. Shen).

### Summary

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