

Mini-cours : Log Calabi-Yau varieties, degenerations of Calabi-Yau varieties, and mirror symmetry

I will try to provide some context and background for recent breakthroughs by Siebert and myself involving constructions of mirrors to various types of varieties. In particular, I will give a gentle introduction to logarithmic Gromov-Witten theory and explain how log GW invariants can be used to generalize constructions of Gross-Siebert and Gross-Hacking-Keel to give a very general mirror symmetry construction.

Suggested background reading is our survey/announcement paper <https://arxiv.org/abs/1609.00624>, and background on log geometry that should be useful for the talks can be found in Chapter 3 of my book, "Tropical geometry and mirror symmetry".

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