Calabi–Yau Manifolds

and Mirror Symmetry

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Please register! (even if you are not attending for credit)

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Oxford, HT 2010

MINI- PROJECTS: see at the end (page 333) for details and a list.

The lecture course will cover the following topics:

*Complex Manifolds

*Kahler Manifolds

*Calabi-Yau Manifolds

*Examples, constructions

*Moduli Spaces: Special Kahler geometry, conifold transitions

*Introduction to Mirror Symmetry: the conjectures, Mirror Maps, Genus-zero Gromov-Witten invariants

*Time permitting: T-duality and the Strominger-Yau-Zaslow conjecture