CLASSIFYING SYMPLECTIC LOG CALABI-YAU SURFACES

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Psychology, Room B36
64 Cummington Street, Boston

Tea: 3:45pm in Room MCS 144

Abstract: Log Calabi-Yau surfaces are rational surfaces with an anti-canonical divisors. The systematic study of such surfaces was initiated by Looijenga in the early 80s. Recently, with a view towards mirror symmetry, major progress has been made on birational geometry and deformation theory of such surfaces by Gross, Hacking and Keel. Moreover, various Torelli type theorems have been proved by GHK and Friedman.

We study the symplectic analogue of Log Calabi-Yau surfaces and show that the symplectic deformation classes are completely determined by the homological information of the anti-canonical divisors. If time permits, I will discuss applications to symplectic fillings.

This is a joint work with Cheuk Yu Mak.

See http://math.bu.edu/research/geom/seminar.html or contact Lino Amorim (lamorin@bu.edu) or Siu Cheong Lau (lau@math.bu.edu) for more information.