LG/CY CORRESPONDENCE VIA MODULARITY

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PSY Room B19
111 Cummington Street, Boston

Tea: 3:45pm in Room 144

Abstract: Gromov-Witten theory virtually counts stable maps into certain algebraic varieties. Its generating functions may have nice structures when the target is a Calabi-Yau variety. We prove that the Gromov-Witten generating functions are quasi-modular forms when the target Calabi-Yau is a quotient of an elliptic curve. Furthermore, we apply Caylay transformation to relate the Gromov-Witten theory of these targets and their counterpart Fan-Jarvis-Ruan-Witten theory directly. This solves the LG/CY correspondence in these cases. The work is joint with Jie Zhou.

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