1154-14-1019Felix Janda* (janda@umich.edu), 1 Einstein Drive, Princeton, NJ 08540. All genus
Landau-Ginzburg/Calabi-Yau correspondence. Preliminary report.

The Landau–Ginzburg/Calabi–Yau (LG/CY) correspondence is a physical correspondence between topological strings on a Calabi–Yau manifold and the corresponding Landau–Ginzburg singularity model. Witten established it as an instance of GLSM wall-crossing. In mathematics, in the example of quintic threefolds, Chiodo–Ruan have formulated and established the correspondence in genus zero. It is an explicit relationship between Gromov–Witten and FJRW invariants of quintics.

In my talk, I will discuss joint work in progress with S. Guo and Y. Ruan on the higher genus LG/CY correspondence for quintic threefolds. (Received September 12, 2019)