

## **GLSMs, partition functions, and genus-0 invariants for hybrid models**

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Gauged linear sigma models (GLSMs) are a physics tool to explore the stringy Kahler moduli space of Calabi-Yaus. Different limiting regions in the moduli space correspond to different low-energy configurations of the GLSM, called phases. Examples of phases are Calabi-Yau geometries, Landau-Ginzburg orbifolds, and generalisations thereof known as hybrids. In the past ten years, new techniques have been developed to extract interesting objects depending on Kahler moduli from GLSMs. In this talk we collect evidence that the sphere and hemisphere partition functions of the GLSM have a universal structure in different types of phases of GLSMs. The relevant objects appearing in this universal description include the Gamma class, I/J-functions, etc. As an application, we show how to compute FJRW invariants for certain hybrid phases of GLSMs. This is based on joint works in collaboration with David Erkinger, Mauricio Romo, and Emanuel Scheidegger.