

## Narain to Narnia

*Tuesday, 1 June 2021 19:00 (1h 15m)*

Recently, a new holographic correspondence was discovered between an ensemble average of toroidal conformal field theories in two dimensions and an abelian Chern-Simons theory in three dimensions coupled to topological gravity. I will discuss a generalisation of this duality for three families of conformal field theories and show that the correspondence works for toroidal orbifolds but not for K3/Calabi-Yau sigma-models and not always for the minimal models. For toroidal orbifolds, the holographic correspondence is extended to correlation functions of twist operators by using topological properties of rational tangles in the three-dimensional ball.

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