Topological AdS/CFT

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Abstract:

The formulation of rigid supersymmetric field theories on curved space leads to a number of results on their strongly-interacting regime, from Witten's topological twist of four-dimensional Yang–Mills theory to the recent numerous localization computations in different dimensions. At the same time, strongly-coupled field theories may also be studied holographically via the AdS/CFT correspondence, provided they admit a gravity dual. The aim of these lectures is to first review aspects of the holographic dictionary for supersymmetric theories on curved manifolds, in order to focus in the second part on topological twists of the boundary field theory.