

# The Swampland, Moduli and Holography

*Tuesday 18 June 2019 14:00 (1 hour)*

String compactifications are essential for connecting string theory to low energy particle physics and cosmology. Moduli stabilisation gives rise to effective Lagrangians that capture the low-energy degrees of freedom. Much recent interest has been on swampland consistency conditions on such effective field theories - which low energy Lagrangians can arise from quantum gravity? How are moduli Lagrangians constrained by consistency with quantum gravity? As moduli stabilisation scenarios often exist in AdS space, we can also ask: what do swampland conditions mean in the context of AdS/CFT? Focussing in particular on the Large Volume Scenario, I describe work towards developing a holographic understanding of moduli stabilisation and swampland consistency conditions.

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