

# Compactness, Finiteness, and the Swampland

*Friday, 26 November 2021 09:30 (30 minutes)*

We demonstrate the validity of the String Lamppost Principle – that all consistent theories of quantum gravity are in the String Landscape – for supersymmetric theories in  $d > 6$  using compactness and connectedness of the moduli space of small instantons, as well as the classification of the associated Coulomb branch. We also argue that some of the swampland conjectures are viewed as the prism of the finiteness of black hole entropy.

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