

Uncovering the Non-supersymmetric Heterotic String Landscape

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The lack of experimental evidence for supersymmetry has recently fueled a resurgence of interest in non-supersymmetric strings, where supersymmetry is absent at the string scale. In particular, new theories have been found recently with a very rich and interesting spectra.

A great deal of effort has been put in understanding the structure underlying the supersymmetric landscape. Much of it is retained for some classes of non-supersymmetric theories, allowing for a precise description of their moduli spaces, predicting new ones, finding dualities between them and relating their spectra with their supersymmetric counterparts.

Moreover, an analysis of geodesics and their infinite distance limits reveals a complex web interrelating both known and previously unknown theories, while the asymptotic behavior of the states becoming massless suggests that some constraints imposed by the swampland program seem to hold when going out of the supersymmetric lamppost.

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