

# Asymptotic Grand Unification

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Asymptotic Grand Unification (aGUT) is an alternative unification paradigm where coupling tend to the same UV fixed point. Models can be constructed in 5 dimensions with a single bulk gauge group. I will present a pathway to classify aGUT models, and apply it to  $SU(N)$  in the bulk. Only two models are viable, based on  $SU(6)$  and with one Higgs doublet stemming from the gauge fields. I will also briefly present how a supersymmetric  $E_6$  aGUT can unify both gauge and Yukawa coupling to the same fixed point and require three generations from anomaly cancellation. Furthermore, the aGUT scale can be as low as few TeV, hence reachable at colliders.

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**Classification de Session:** Beyond the Standard Model

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