# SEMPARIS – Séminaires en région parisienne

http ://string.lpthe.jussieu.fr/semparis/

## Particle Physics at LPTHE

**Mardi 16 Avril 2019, 14 :00**
LPTHE, library
Domaines : hep-ph

Titre : *Unification of gauge and Yukawa couplings*

Orateur : **Alan Cornell ( Witwatersrand U. )**

Résumé : *The unification of gauge and top Yukawa couplings is an attractive feature of gauge-Higgs unification models in extra-dimensions. This feature is usually considered difficult to obtain based on simple group theory analyses. We reconsider a minimal toy model including the renormalisation group running at one loop. Our results show that the gauge couplings unify asymptotically at high energies, and that this may result from the presence of an UV fixed point. The Yukawa coupling in our toy model is enhanced at low energies, showing that a genuine unification of gauge and Yukawa couplings may be achieved.*