**SAIP2014** 



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### Evolution of Yukawa Couplings and Quark Flavour Mixings in the 2UED

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# Abstract content <br> &nbsp; (Max 300 words)<br><a href="http://events.saip.org.za/getFile.py/atarget="\_blank">Formatting &<br>Special chars</a>

The evolution equation of the Yukawa couplings and quark mixings are performed for the one-loop renormalization group equations in a six-dimensional Standard Model on a S1/Z2 orbifold. Different possibilities for the matter fields are discussed, that is, where they are in the bulk or localized to the brane. These two possibilities give rise to quite similar behaviors. By studying the implications of the evolution of the Yukawa couplings and mass ratios we find that, for both scenarios the theory is valid up to the unification scale, leading to significant corrections.

#### Apply to be<br> considered for a student <br> &nbsp; award (Yes / No)?

Yes

#### Level for award<br>%nbsp;(Hons, MSc, <br> &nbsp; PhD)?

PhD

#### Main supervisor (name and email)<br>and his / her institution

Alan. Cornell School of Physics, University of the Witwatersrand

## Would you like to <br> submit a short paper <br> for the Conference <br> Proceedings (Yes / No)?

Yes

Primary author: Mr ABDALGABAR, Ammar (School of Physics, University of the Witwatersrand)

Co-author: Dr CORNELL, Alan (NITheP)

Presenter: Mr ABDALGABAR, Ammar (School of Physics, University of the Witwatersrand)

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