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SCIENTIFIC PUBLICATIONS

A. Papers

1. M. Toharia, M. Trodden, E.J. West, “*Existence and Stability of Domain Walls in Gravitating Extra Dimensions,*” *to be submitted, Nov 2009*
2. K. Agashe, D. Kim, M. Toharia, D. Walker, “*Double Kinematic Edges and Cusps from Decays to non- Z_2 Dark Matter,*” *to be submitted, Nov 2009*
3. G. Couture, C. Hamzaoui, S.S.Y. Lu, M. Toharia, “*Patterns in the Fermion Mixing Matrix, a bottom-up approach,*” arXiv:0910.3132 [hep-ph].
4. A. Azatov, M. Toharia, L. Zhu ”*Higgs Mediated FCNC’s in Warped Extra Dimensions,*” Phys.Rev.**D80**, 035016, (2009); arXiv:0906.1990 [hep-ph].
5. A. Azatov, M. Toharia, L. Zhu ”*Radion mediated Flavor Changing Neutral Currents,*” Phys.Rev.**D80**, 031701, (2009); arXiv:0812.2489 [hep-ph].
6. M. Toharia, ”*Higgs-Radion Mixing with Enhanced Di-Photon Signal,*”, Phys.Rev.**D79**, 015009, (2009); arXiv:0809.5245[hep-ph].
7. M. Toharia, “*Odd Tachyons in Compact Extra Dimensions,*” arXiv:0803.2503[hep-th].
8. M. Toharia and M. Trodden, “*Existence and Stability of Non-Trivial Scalar Field Configurations in Orbifolded Extra Dimensions,*”, Phys.Rev.**D77**, 025029, (2008); arXiv:0708.4008 [hep-ph].
9. M. Toharia and M. Trodden, “*Metastable Kinks in the Orbifold*”, **Phys.Rev.Lett.****100**, 041602, (2008); arXiv:0708.4005 [hep-ph].
10. G. L. Kane, P. Kumar, D. E. Morrissey, M. Toharia, “*Connecting (Supersymmetry) LHC Measurements with High Scale Theories*”, Phys.Rev.**D75**, 115018 (2007); [hep-ph/0612287]
11. B. Thomas and M. Toharia, “*Lepton flavor violation and supersymmetric Dirac leptogenesis*”, Phys.Rev.**D75**, 013013, (2007); [hep-ph/0607285]

12. B. Thomas and M. Toharia, “*Dirac Neutrinoogenesis and Split Supersymmetry*”, Phys.Rev.**D73**, 063512, (2006); [hep-ph/0511206]
13. A. Datta, G. L. Kane and M. Toharia, “*Is It SUSY?*”, [hep-ph/0510204]
14. M. Toharia and J. D. Wells, “*Gluino Decays with Heavier Scalar Superpartners*”, JHEP 0602, 015 (2006); [hep-ph/0503175]
15. B. Grzadkowski, M. Toharia, “*Low Energy Effective Theory from a Non-Trivial Scalar Background in Extra Dimensions*”, Nucl. Phys. **B686**, 165 (2004); [hep-th/0401108]
16. J.F. Gunion, M. Toharia, J.D. Wells, “*Precision Electroweak Data and the mixed Radion-Higgs sector of Warped Extra Dimensions*”, Phys. Lett. **B585**, 295 (2004); [hep-ph/0311219]
17. M. Toharia, “*The Radion and the perturbative metric in RS1*”, Mod. Phys. Lett. **A19**, 37-47 (2004); [hep-th/0212036]
18. D. Dominici, B. Grzadkowski, J.F. Gunion, M. Toharia, “*The scalar sector of the Randall-Sundrum model*”, Nucl. Phys. **B671**, 243-292, (2003); [hep-ph/0206192]
19. C. Hamzaoui, M. Pospelov, M. Toharia, “*Higgs mediated FCNC in Supersymmetric models with large tan beta*”, Phys. Rev. **D59**, 095005, (1999); [hep-ph/9807350]

B. Conference Proceedings

1. M. Toharia, “*Flavor Bounds and Phenomenology in the Scalar Sector of RS Scenarios*”, Talk given by M.T. at SUSY 2009, Northeastern University, Boston, MA, Spring 2009. To appear in the Proceedings, arXiv:0910.3624 [hep-ph].
2. M. Toharia, “*Precision Electroweak Constraints on the Mixed Radion-Higgs Sector*”, Talk given by M.T. at SUSY 2003: Supersymmetry in the Desert, U. of Arizona, Tucson, AZ, June 5-10, 2003. To appear in the Proceedings, [hep-ph/0402092]
3. D. Dominici, B. Grzadkowski, J.F. Gunion, M. Toharia, “*Higgs boson interactions within the Randall-Sundrum model*”, Talk given by B.G. at “*From the Planck Scale to the Electroweak Scale: Supersymmetry and Brane World (Planck 02)*”, Kazimierz, Poland, 25-29 May 2002. Published in Acta Phys.Polon. **B33**, 2507-2522, (2002), [hep-ph/0206197]
4. T. Adams et al., “*Young Physicists’ Forum*”, To appear in the proceedings of APS / DPF / DPB Summer Study on the Future of Particle Physics (Snowmass 2001), Snowmass, CO, 30 Jun - 21 Jul 2001. Published in eConf **C010630**, I003, (2001) . [hep-ex/0110027]
5. C. Hamzaoui, A. Raymond, M. Toharia, M. Pospelov, “*Flavor Changing neutral currents in supersymmetric models with large tan beta*”, Talk given by M.T. at MRST Meeting, Ottawa, Canada, 1999. Published in *Ottawa 1999, High energy physics at the millennium* 56-63.

C. Dissertation and Thesis

1. M. Toharia, “*Phenomenology of the mixed Higgs-radion system in the compact Randall-Sundrum scenario*”, PhD Dissertation (Adviser John F. Gunion), University of California, Davis, June 2004.
2. M. Toharia, “*Contraintes sur les courants neutres à changement de saveur dans les théories supersymétriques, lorsque $\tan\beta$ est grande*”, M.Sc. Thesis (Adviser Chérif Hamzaoui), Université du Québec à Montréal, August 1999.