

- [20] Z. Maki, M. Nakagawa, and S. Sakata, Prog. Theor. Phys. **28**, 870 (1962).
- [21] V.A. Kuzmin, V.A. Rubakov, and M.E. Shaposhnikov, Phys. Lett. B **155**, 36 (1985).
- [22] V.A. Kuzmin, V.A. Rubakov, and M.E. Shaposhnikov, Phys. Lett. B **191**, 171 (1987); M. Shaposhnikov, Nucl. Phys. B **308**, 885 (1988).
- [23] W.B. Lin, D.H. Huang, X. Zhang, and R.H. Brandenberger, Phys. Rev. Lett. **86**, 954 (2001).
- [24] P.B. Pal and L. Wolfenstein, Phys. Rev. D **25**, 766 (1982); V. Barger, R.J.N. Phillips, and S. Sarkar, Phys. Lett. B **352**, 365 (1995).
- [25] F. Bezrukov, H. Hettmansperger, and M. Lindner, arXiv:0912.4415 [hep-ph].
- [26] C. Picciotto and M. Pospelov, Phys. Lett. B **605**, 15 (2005); S. Khalil and O. Seto, JCAP **0810**, 024 (2008).
- [27] P. Jean *et al.*, Astron. Astrophys. **407**, L55 (2003).
- [28] A. Boyarsky, O. Ruchayskiy, and M. Shaposhnikov, Ann. Rev. Nucl. Part. Sci. **59**, 191 (2009), and references therein.
- [29] J. Chang, *et al.*, [ATIC Collaboration], Nature **456**, 362 (2008).
- [30] S. Torii, *et al.*, [PPB-BETS Collaboration], arXiv:0809.0760 [astro-ph].
- [31] O. Adriani, *et al.*, [PAMELA Collaboration], Nature **458**, 607 (2009).
- [32] F. Aharonian *et al.*, [H.E.S.S. Collaboration], Astron. Astrophys. **508**, 561 (2009).
- [33] A.A. Abdo, *et al.*, [Fermi/LAT Collaboration], Phys. Rev. Lett. **102**, 181101 (2009).
- [34] S. Profumo, arXiv:0812.4457 [astro-ph].
- [35] V. Barger, Y. Gao, W.Y. Keung, D. Marfatia, and G. Shaughnessy, Phys. Lett. B **678**, 283 (2009).