



High Energy Physics - Phenomenology

# Neutralino dark matter with a Light Higgs

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We examine the neutralino dark matter phenomenology in supersymmetric scenarios with nonuniversal Higgs masses at the gauge coupling unification scale that can accommodate a light Higgs boson, where the correct relic density is obtained mostly through the annihilation into a pseudoscalar  $A$ . Our analysis shows that most part of the  $A$  pole region can produce detectable gamma-ray and antiproton signals. We further focus on uncertainties influencing the results in indirect and mainly direct detection.

Comments: 6 pages, 4 figures, talk at Moriond 2011 conference on EW Interactions and Unified Theories

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