

LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN

ARNOLD SOMMERFELD CENTER FOR THEORETICAL PHYSICS



Sommerfeld Theory Colloquium

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The potential of new gamma-ray telescopes for discovering new physics

Soon the Gamma-ray Large Area Space Telescope (GLAST) will be launched. It will have at least an order of magnitude greater sensitivity than its predecessor EGRET, with larger area, better angular and energy resolution and larger energy range (up to 300 GeV). In the mean time, large Air Cherenkov Telescopes like the pioneering HESS and MAGIC, and also CANGAROO and VERITAS have found a large number of interesting sources, and discussions of even larger telescope arrays have begun. The talk will focus on the capabilities of GLAST, but also on the complementary aspects of space-based versus ground-based systems, taking the search for signals of particle dark matter annihilations as a partiuclarly interesting example. Some other cases of potential new, or exotic, physical phenomena which may be probed by the next generation of gamma-ray experiments will also be discussed.

Wednesday, 9th January 08, 11:15 h, Room 348 / 349, Theresienstr. 37 / III