

LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN

ARNOLD SOMMERFELD CENTER FOR THEORETICAL PHYSICS



Sommerfeld Theory Colloquium

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Cosmology with Type Ia Supernovae: where do we stand today?

The role of Type Ia supernovae in observational cosmology has evolved from being "avant-garde" in the early 1990's until today's mature status of precision cosmology. Several large transient surveys have been detecting supernovae routinely, near and far, with the aim of probing what is causing the accelerated expansion of the Universe. With time, the focus has changed towards addressing the intricacies of astrophysical effects that could bias the fits of cosmological parameters, most notably the nature of dark energy. In this talk, aimed at high-energy physics theorists(!), I will try to convey the status of the field, high-lighting some progress and set-backs, based on studies of the closest Type Ia SN in modern time that exploded in the beginning of 2014 in the near-by galaxy M82.

Wednesday, 5 November 2014, 16:15h, Room A348/349, Theresienstr. 37/III