



Supernova Cosmology with ZTF, ULTRASAT and beyond.

Tuesday, 10 December, 2024
Auditorium & Webcast 16:00 h

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Cosmology has seen tremendous observational advancements, yet fundamental questions, such as the nature of dark energy, remain unresolved. Recent data from the DESI survey, combined with CMB and Type Ia Supernovae (SN_{Ia}) measurements, suggest a potential time-dependence in the dark energy equation of state. The Zwicky Transient Facility, leading optical time-domain survey since 2018, discovered thousands of SN_{Ia}. These data, together with high-redshift SN_{Ia}, will enable robust, independent tests of dark energy variability. The ULTRASAT mission will provide unique UV observations of nearby SN_{Ia} and help to shed light on dust extinction and progenitor systems.

In my talk, I will present an overview of current research in observational cosmology with SN_{Ia}, spanning topics from structure formation to dark energy, with a focus on contributions from DESY and its partner institutions.



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