

IQSE–Hagler–Mitchell Institute Workshop on Theoretical Physics

IQSE Seminar Room (MPHY 578), Texas A&M University, College Station, TX

Zoom Info: <https://tamu.zoom.us/j/8192969939?pwd=L2tET2tEeU54YXNHelY2VVZWdnEzdz09>

Meeting ID: 819 296 9939, Pass code: 297578

Wednesday 6/15/2022

Chairs: Marlan Scully/Olga Kocharovskaya

Time	Speaker	Title
8:30-8:55	Breakfast	
8:55-9:00	Marlan Scully	Opening Remarks
9:00-9:30	Nicholas Suntzeff	The Hubble Flow from Type Ia Supernovae
9:30-10:00	Girish Agarwal	Renaissance of Squeezed States
10:00-10:30	Suhail Zubairy	Counterfactual communication
10:30-11:00	Coffee Break	
11:00-11:30	Arash Azizi	Causality and Entanglement in Unruh Radiation
11:30-12:00	Jonathan Ben-Benjamin	Why do we need to care about completeness?
12:00-12:30	Stephen Fulling	Fearless Modeling of Boundary Energy in Quantum Field Theory by Power-Law Potentials

Lunch to be served between 12:30 and 13:00.

Wednesday 6/15/2022

Chairs: Girish Agarwal/Suhail Zubairy

Time	Speaker	Title
13:00-13:30	Michael Duff	Nature versus NATURE
13:30-14:00	Ergin Sezgin	Swampland and a case for six dimensions
14:00-14:30	Shenglong Xu	Encoding and decoding quantum information in many-body dynamics
14:30-15:00	Coffee Break	
15:00-15:30	Olga Kocharovskaya	Towards Nuclear Metrology with Super-Narrow Nuclear Resonances
15:30-16:00	Vitaly Kocharovsky	Quantum supremacy, atomic boson sampling and the Hafnian Master Theorem
16:00-16:30	Roland Allen	From the origin of spacetime coordinates and quantum fields to quantitative predictions for near-term experiments