



# DOE HEP Visit

## Tuesday, 8 October 2024

### HEP Program at MIT: The CMS Experiment and FCC - Cosman Room (6C-442) (08:30 - 12:02)

time	[id] title	presenter
09:00	[5] Introduction - CMS Experiment Detector Projects	PAUS, Christoph
09:25	Coffee Break	
09:55	[6] Rare decays as tools to find new physics	WANG, Zhangqier
10:20	[7] Dark Showers - Soft Unclustered Energy Patterns	LAVEZZO, Luca
10:45	[8] Electroweak Precision Physics at CMS and the FCC Plans	EYSERMANS, Jan
11:10	[9] CMS Level 1 Trigger and Heterogeneous computing	HARRIS, Philip
11:35	[10] High momentum Higgs and Light mediator searches	NOVAK, Andrzej HARRIS, Philip

### HEP Program at MIT: Center for Theoretical Physics Presentations - Cosman Room (6C-442) (13:15 - 16:20)

-Conveners: Washington Taylor

time	[id] title	presenter
13:15	[11] CTP/Task C overview	TAYLOR, Washington
13:45	[12] Optimal Transport, Energy Correlators, and Beyond	THALER, Jesse
14:00	[13] Primordial Black Hole Production from Hybrid Inflation	GUTH, Alan
14:15	[14] Fundamental physics from galaxy surveys with effective field theory	IVANOV, Mikhail
14:30	[15] Forecasting Dark Matter Signals for the Early Universe and the Gamma-Ray Sky	SLATYER, Tracy
14:45	[16] Coffee break	
15:00	[17] Developments in String Field Theory	ZWIEBACH, Barton
15:15	[18] Spacetime emergence and symmetry in quantum gravity	HARLOW, Daniel
15:30	[19] Emergence of spacetime	LIU, Hong
15:45	[20] Emergence of Spacetime and Semiclassical Gravity	ENGELHARDT, Netta
16:00	[21] What's Done Cannot Be Undone: Non-Invertible Symmetries	SHAO, Shu-Heng