Theory Frontier

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Topical Group		Topical Group co-Conveners			
TF01	String theory, quantum gravity, black holes	Daniel Harlow	Shamit Kachru	Juan Maldacena	
TF02	Effective field theory techniques	Patrick Draper	Ira Rothstein		
TF03	CFT and formal QFT	David Poland	Leonardo Rastelli		
TF04	Scattering amplitudes	Zvi Bern	Jaroslav Trnka		
TF05	Lattice gauge theory	Zohreh Davoudi	Taku Izubuchi	Ethan Neil	
TF06	Theory techniques for precision physics	Radja Boughezal	Zoltan Ligeti		
TF07	Collider phenomenology	Fabio Maltoni	Shufang Su	Jesse Thaler	
TF08	BSM model building	Patrick Fox	Hitoshi Murayama		
TF09	Astro-particle physics and cosmology	Dan Green	Joshua Ruderman	Ben Safdi	Jessie Shelton
TF10	Quantum information science	Simon Catterall	Roni Harnik	Veronika Hubeny	
TF11	Theory of Neutrino Physics	André de Gouvêa	Irina Mocioiu	Saori Pastore	Louis Strigari

Theory Frontier: Liaisons

Energy Laura Reina (Florida State U)	**Neutrino Physics** Irina Mociouiu (Penn State U) & Kaladi S. Babu (Oklahoma State U)
Rare Processes and Precision Alexey Petrov (Wayne State)	**Cosmic** Flip Tanedo (UC Riverside)
Theory	**Accelerator** Lian-Tao Wang (U Chicago)
Instrumentation	**Computational** Steven Gottlieb (Indiana U)
Underground Facilities	**Community Engagement** Devin Walker (Dartmouth)

+ SEC Theory

Theory Frontier: Activities

- **Theory Frontier Conference** (March 17-19 2021, KITP)
  Showcase theory developments, consolidate activities in advance of CSS, cultivate interactions between theorists working across frontiers.

- **Letters of Interest (LOI)** (Now - July 31, 2021)
  Includes opinions, interests and proposals that could be further studied. Max 2 pages of text, plus relevant bibliography.

  Note: TF extension only! ***LOI deadline for Project Frontiers*** *(EF, RF, NF, CF, …) is* ***August 31, 2020,*** *to keep in mind for cross-listed LOIs.*

- **Contributed Papers** (Now - July 31, 2021)
  White papers on specific scientific areas, technical articles presenting new results on relevant physics topics, and reasoned expressions of physics priorities, including those related to community involvement.