Snowmass Computational Frontier Workshop

Monday, 10 August 2020

CompF6: Quantum computing (14:00 - 15:32)

-Conveners: Martin Savage; Gabriel Perdue; Travis Humble

time	[id] title	presenter
14:00	[45] Introductory Remarks	PERDUE, Gabriel SAVAGE, Martin HUMBLE, Travis
14:10	[59] Tensor Networks	MEURICE, Yannick
14:22	[60] Simulation of Quantum Field Theories	
14:34	[61] Quantum information, error correction and holography	
14:46	[62] QFTs on AdS	HARLOW, Daniel
14:58	[64] Data Analysis in HEP with Quantum Computers	
15:10	[63] Quantum Computing Co-design for HEP	HUMBLE, Travis

Tuesday, 11 August 2020

CompF6: Quantum computing (12:00 - 13:36)

-Conveners: Travis Humble; Martin Savage; Gabriel Perdue

time	[id] title	presenter
12:00	[65] Quantum simulation and hardware co-design	POOSER, Raphael
12:12	[66] Quantum computing for event generators	BAUER, Christian
12:24	[67] Quantum algorithms for quantum sensing	SORNBORGER, Andrew
12:36	[68] NISQ-era Quantum Devices for HEP	LINKE, Norbert
12:48	[69] Algorithm Development for beyond NISQ-era devices	WIEBE, Nathan
13:00	[70] Quantum Networks for HEP	PETERS, Nick
13:12	[71] Issues in HEP relevant to QML, decoherence, and quantum foundations	ALBRECHT, Andreas
13:24	[108] Search Strategies for new particles with SRF cavities	ROMANENKO, Alexander