

Seattle Snowmass Summer Meeting 2022

Monday, July 18, 2022

Computational Frontier: CompF5 End User Analysis - 254 (8:00 AM - 10:00 AM)

-Conveners: Peter Onyisi; Amy Roberts; Gavin Davies

time	[id] title	presenter
8:00 AM	[M14] CompF5 introduction	ROBERTS, Amy DAVIES, Gavin ONYISI, Peter
8:10 AM	[M50] Summary of Contributions	ROBERTS, Amy DAVIES, Gavin ONYISI, Peter
8:30 AM	[M51] Recommendations & Highlights of Report	ROBERTS, Amy DAVIES, Gavin ONYISI, Peter
9:10 AM	[M52] General Discussion	

Computational Frontier: CompF2 Theoretical Calculations and Simulation - 254 (10:00 AM - 12:00 PM)

-Conveners: ji qiang; Kevin Pedro; Peter Boyle

time	[id] title	presenter
10:00 AM	[M18] Cosmic Calculations	LUKIC, Zarija
10:10 AM	[M19] Accelerator Simulation	HUEBL, Axel
10:20 AM	[M20] Detector Simulation	GENSER, Krzysztof
10:30 AM	[M21] Physics Generators	ISAACSON, Joshua
10:40 AM	[M22] Perturbative Calculations	NEUMANN, Tobias NEUMANN, Tobias
10:50 AM	[M23] Lattice QCD	KELLY, Christopher
11:00 AM	Coffee break	
11:10 AM	[M24] CompF2 Report Recommendations	PEDRO, Kevin BOYLE, Peter QIANG, ji
11:20 AM	[M25] Discussion	

Tuesday, July 19, 2022

Computational Frontier: CompF3 Machine Learning (20F) - 238 (8:00 AM - 10:00 AM)

time	[id] title	presenter
8:00 AM	[M81] Introduction	WHITESON, Daniel TERAO, Kazuhiro SHANAHAN, Phiala
8:05 AM	[M82] Uncertainty, Validation, Interpretation of ML	GHOSH, Aishik
8:15 AM	[M83] First-principles theory calculations and detector simulations	MOULT, Ian MOULT, Ian
8:25 AM	[M84] Data analysis	DUARTE, Javier
8:35 AM	[M85] Anomaly Detection	SHIH, David
8:45 AM	[M86] Detector and Accelerator Design and Operations	EDELEN, Auralee
8:55 AM	[M87] Community Tools, Standards, Resources and Management.	HARRIS, Philip
9:05 AM	[M88] Education and Engagement	THAIS, Savannah
9:15 AM	[M89] Discussion	

Computational Frontier: CompF4 Storage and Processing Resource Areas - 238 (10:00 AM - 12:00 PM)

-Conveners: Frank Wuerthwein; Meifeng Lin; Wahid Bhimji

time	[id] title	presenter
10:00 AM	[M90] Introduction	LIN, Meifeng BHIMJI, Wahid
10:05 AM	[M91] Processing	FISK, Ian LIN, Meifeng
10:20 AM	[M92] AI hardware	DUARTE, Javier TRAN, Nhan
10:35 AM	[M93] Storage	JAYATILAKA, Bo MALTZAHN, Carlos VAN GEMMEREN, Peter
10:50 AM	[M94] Analysis Facilities	WATTS, Gordon NEUBAUER, Mark SHADURA, Oksana
11:05 AM	[M95] Edge Services	RIND, Ofer BENJAMIN, Weaver
11:20 AM	[M96] Networking	GUOK, Chin DART, Eli MCKEE, Shawn
11:35 AM	[M97] Overall Findings and Recommendations	LIN, Meifeng BHIMJI, Wahid
11:45 AM	[M98] Discussion	

Wednesday, July 20, 2022

Computational Frontier: CompF1 Experimental Algorithm Parallelization - 248 (8:00 AM - 9:50 AM)

time	[id] title	presenter
8:00 AM	[M67] Portability: A Necessary Approach for Future Scientific Software	BHATTACHARYA, Meghna
8:15 AM	[M68] Future architectures and challenges for experimental algorithms	HABIB, Salman
8:30 AM	[M69] Overview of CompF1 report	CERATI, Giuseppe CERATI, Giuseppe HEITMANN, Katrin HOPKINS, Walter
8:45 AM	Coffee	
8:55 AM	[M70] Discussion of the Report and Recommendations	
9:40 AM	[M71] Summary of report enhancements	CERATI, Giuseppe CERATI, Giuseppe HEITMANN, Katrin HOPKINS, Walter

Computational Frontier: CompF6 Quantum Computing - 248 (10:00 AM - 12:00 PM)

time	[id] title	presenter
10:00 AM	[M68] Introduction	PERDUE, Gabriel SAVAGE, Martin HUMBLE, Travis
10:10 AM	[M69] SQMS	VAN ZANTEN, David ZORZETTI, Silvia
10:20 AM	[M70] Quantum Simulation	BAUER, Christian
10:30 AM	[M71] Tensor Networks	MEURICE, Yannick
10:40 AM	[M72] Classical Simulation of Quantum Systems	LYON, Adam
10:50 AM	[M73] Computing Needs for Quantum Materials	GRIFFIN, Sinéad
11:00 AM	Break	
11:10 AM	[M74] Quantum Networks	PETERS, Nicholas
11:20 AM	[M75] Quantum Computing for Data Analysis	DELGADO, Andrea
11:30 AM	[M76] Computing Systems and Software	Dr HAMILTON, Kathleen
11:40 AM	Schedule Slack and Discussion	

Thursday, July 21, 2022

Computational Frontier: CompF7 Reinterpretation and long-term preservation of data and code - 231 (10:00 AM - 12:00 PM)

-Conveners: Stephen Bailey

time	[id] title	presenter
10:00	A05 Overview of CompF7 Report	BAILEY, Stephen
10:20	A06 CompF7 White Paper: Data and Analysis Preservation, Recasting, and Reinterpretation	FEICKERT, Matthew
10:30	A07 CompF7 White Paper: Analysis Description Language: A DSL for HEP Analysis	SEKMEN, Sezen
10:40	A08 CompF7 White Paper: Data Preservation for Cosmology	BAILEY, Stephen
10:50	A09 CompF7 Discussion	

Friday, July 22, 2022

Computational Frontier: Report Discussion - 220 (8:00 AM - 10:05 AM)

-Conveners: Benjamin Nachman; Steven Gottlieb; Daniel Elvira

time	[id] title	presenter
8:00 AM	[M801] Introduction	NACHMAN, Benjamin ELVIRA, Daniel GOTTLIEB, Steven
8:05 AM	[M81] Experimental Algorithms Parallelization	CERATI, Giuseppe HEITMANN, Katrin HOPKINS, Walter
8:10 AM	[M82] Theoretical Calculations and Simulation	PEDRO, Kevin BOYLE, Peter QIANG, ji
8:15 AM	[M83] Machine Learning	WHITESON, Daniel TERAO, Kazuhiro SHANAHAN, Phiala
8:20 AM	[M84] Storage and processing resource access	WUERTHWEIN, Frank LIN, Meifeng BHIMJI, Wahid
8:25 AM	[M85] End user analysis	ROBERTS, Amy DAVIES, Gavin ONYISI, Peter
8:30 AM	[M86] Quantum computing	PERDUE, Gabriel SAVAGE, Martin HUMBLE, Travis
8:35 AM	[M87] Reinterpretation and long-term preservation of data and code	CRANMER, Kyle CARRASCO KIND, Matias BAILEY, Stephen
8:40 AM	[M88] Overall Computing Frontier report	NACHMAN, Benjamin ELVIRA, Daniel GOTTLIEB, Steven
8:45 AM	[M89] Discussion	

Computational Frontier: Industry Session - 220 (10:00 AM - 12:00 PM)

-Conveners: Peter Boyle; Steven Gottlieb

time	[id] title	presenter
10:00 AM	[M25] Tom Gibbs, Nvidia	GIBBS, Tom
10:30 AM	[M26] Tom Troksa, Intel	TOM , Troksa
11:00 AM	[M27] Andrew Putnam, Microsoft	PUTNAM, Andrew
11:30 AM	[M28] Rob Schreiber, Cerebras	SCHRIEBER, Rob

Saturday, July 23, 2022

Computational Frontier: Small Experiments - 111 (10:00 AM - 12:00 PM)

time	[id] title	presenter
10:00	A10 [A10] Welcome and Introduction	NACHMAN, Benjamin SNIDER, Erica
10:10	A19 [A19] Brief overview of white paper	MONZANI, Maria Elena
10:30	A11 [A11] CompF report overview	NACHMAN, Benjamin ELVIRA, Daniel GOTTLIEB, Steven
10:50	A16 [A16] Discussion	