ACAT 2024

Monday, 11 March 2024

<u>Plenary</u> - Theatre (09:00 - 10:40)

   -Conveners: James Leonardi; Jennifer Ngadiuba; Jerome LAURET

time	[id] title	presenter
09:00	[130] Welcome to ACAT 2024 in Stony Brook	Dr LAURET, Jerome
09:15	[164] Welcome address by SBU	Prof. LEJUEZ, Carl
09:30	[165] Science at SBU/BNL	DESHPANDE, Abhay
10:10	[131] Recent advances in neuromorfic computing	AKOPYAN, Filipp

<u>Plenary</u> - Theatre (11:20 - 13:00)

   -Conveners: James Leonardi; Jerome LAURET; Jennifer Ngadiuba

time	[id] title	presenter
11:20	[132] AI and Ethics	CONITZER, Vincent
12:20	[135] Q&A Panel	CIPRIJANOVIC, Aleksandra SEXTON-KENNEDY, Elizabeth WATTS, Gordon CONITZER, Vincent

Tuesday, 12 March 2024

<u>Plenary</u> - Theatre (09:00 - 10:45)

  -Conveners: Eric Johnson; Qiulan Huang; Gordon Watts

time	[id] title	presenter
09:00	[140] Updates from the organizers	
09:15	[141] Astronomical foundation models & the Polymathic AI Initiative	GOLKAR, Siavash
09:45	[145] AI and microelectronics for science	TRAN, Nhan
10:15	[152] Sustainable computing and the MLPerf project	WU, Carole-Jean

Wednesday, 13 March 2024

Plenary - Theatre (09:00 - 10:45)

  -**Conveners: Khanak Bhargava; Maria Girone; Michel Hernandez Villanueva**

time	[id] title	presenter
09:00	[143] Updates from the organizers	
09:15	[166] Building Foundational Models for Environmental Modelling and Prediction	LUISE, Ilaria
09:45	[136] Digital Twins from Industry to Science	GIBBS, Tom
10:15	[146] The Open Compute Project and its application at Meta	HELVIE, Steve

Plenary - Theatre (11:30 - 13:00)

  -**Conveners: Eric Johnson; Michael Poat; Elizabeth Sexton-Kennedy**

time	[id] title	presenter
11:30	[139] Quantum computers for particle theory	CARRAZZA, Stefano
12:00	[148] Making ML Robust for Physics Discovery	WILLIAMS, J Michael
12:30	[167] Computing the wave: Where the Gravitational Wave Community benefits from HEP, and where it differs?	MEYER-CONDE, Marco

Thursday, 14 March 2024

<u>Plenary</u> - Theatre (09:00 - 11:00)

-**Conveners: Smeet Chheda; Wahid Bhimji; Meifeng Lin**

time	[id] title	presenter
09:00	[133] Long-term high-volume data storage in ceramic	PFLAUM, Christian HELLMOLD, Steffen
09:30	[138] Interfaces, discovery, and intelligence in Digital Earth Observation	LUMNITZ, Stefanie
10:00	[153] Scalable neural networks for event reconstruction at current and future colliders	PATA, Joosep
10:30	[142] The co-evolution of HPC computing and LQCD	CHRIST, Norman

<u>Plenary</u> - Theatre (11:30 - 13:00)

-**Conveners: Smeet Chheda; Deborah BARD; Ian Fisk**

time	[id] title	presenter
11:30	[160] Detecting rare events using artificial intelligence	LI, Aobo
12:00	[137] What will it take to do a HL-LHC analysis in 15'?	GRAY, Lindsey
12:30	[147] Differentiable Programming in HEP	HEINRICH, Lukas Alexander

Friday, 15 March 2024

<u>Plenary</u> - Theatre (08:45 - 11:00)

    -Conveners: David Britton; Elizabeth Sexton-Kennedy

time	[id] title	presenter
08:45	[151] Exascale infrastructures for Science	BARD, Deborah
09:15	[134] Intersection of machine learning and quantum physics	YOU, Yi-Zhuang
09:45	[144] Quantum algorithms for the simulation of QCD processes	CHAWDHRY, Herschel
10:15	[149] Mojo: A novel programming language for AI	CLAYTON, Jack
10:45	[196] Best poster 1st place: Interface to Unity for High Energy Physics detector visualization	SONG, Tianzi
10:50	[197] Best poster 2nd place: columnflow: Fully automated analysis through flow of columns over arbitrary, distributed resources	WIEDERSPAN, Bogdan RIEGER, Marcel
10:55	[198] Best poster 3rd place: Introduction of dynamic job matching optimization for Grid middleware using Site Sonar infrastructure monitoring	WIJETHUNGA, Kalana

<u>Plenary</u> - Theatre (11:30 - 13:00)

    -Conveners: Jennifer Ngadiuba; Jerome LAURET; James Leonardi

time	[id] title	presenter
11:30	[156] Track 1 Summary	HEGNER, Benedikt
11:50	[157] Track 2 Summary	HEINRICH, Lukas Alexander
12:10	[158] Track 3 Summary	SIGNORILE , Chiara
12:30	[159] ACAT 2024 Conclusion and Outlook	BRITTON, David NGADIUBA, Jennifer Dr LAURET, Jerome