# **HEP-IC**

# Wednesday, 1 May 2024

# New development efforts, trends and plans - Berkner Hall (Bldg. 488) (08:30 - 12:30)

#### -Conveners: Prashansa Mukim

time	[id] title	presenter
08:30	[20] Monolithic stitched pixel sensor	DE MELO, Joao
08:50	[21] Trends in pixel readout chip designs for high rate and radiation	GORNI, Dominik
09:10	[22] Precision timing in HEP experiments	BRAGA, Davide FREDENBURG, Jeffrey
09:30	[25] Wide band-gap semiconductors	MANDAL, Soumyajit
09:50	[24] Unconventional computing approaches using time, stochasticity, and physics	DANIELS, Matthew
10:30	Coffee break	
10:50	[26] Integrated silicon photonics	SAXENA, Vishal
11:30	[23] Front-ends for extreme conditions	GRACE, Carl
11:50	[27] Cryogenic Device Modeling	SEIDEL, Olivia
12:10	[47] Cryogenic Front-end ASICs for Low-Noise Charge and Light Readout	MUKIM, Prashansa

## New development efforts, trends and plans - Berkner Hall (Bldg. 488) (13:30 - 16:45)

#### -Conveners: Dominik Gorni

time	[id] title	presenter
13:30	[28] Signal processing and filtering: analog, digital and beyond (AI?)	RESCIA, Sergio
13:50	[29] Circuits and devices for edge AI	SALMAN, Emre
14:30	[30] Verification with Cocotb	KEENER, Paul
14:50	[31] Verification IP development	HOFF, Jim
15:10	Coffee break	
15:25	[48] Superconducting	WOODWORTH, Kyle
15:45	[34] Open-source ASIC ecosystem	PRAKASH, Tarun

### New development efforts, trends and plans: Roundtable - Berkner Hall (Bldg. 488) (16:45 - 17:20)

#### -Conveners: Prashansa Mukim

time	[id] title	presenter
16:45	[35] Open discussion (cancelled)	