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Panel discussion

Tuesday, October 6, 2020 1:45 PM (45 minutes)

Discussions will be organized around the following questions:

1) What areas of the LGT program in general, and the topic you are representing in particular, require a comprehensive study to be conducted as part of the Snowmass process in order to quantify the impact of the LGT results on improving phenomenological constraints and the overall experimental programs. i.e., are there areas for which we need to go beyond the USQCD whitepapers and do a more thorough study?

2) What are the computational, algorithmic, and human resource requirements of the program to achieve the impact identified and quantified in the previous question? What is the best HPC model that facilitates scientific progress in our community? If we were to have an input in the development of the upcoming machines and technologies, what would we propose? What is the significance of new classical algorithms, and how can they be combined with developing paradigms based on Machine Learning and Quantum Computing to expedite our scientific output already in the next decade?

Presenters: KRONFELD, Andreas (Fermilab); HASENFRATZ, Anna (university of colorado boulder); DETAR, Carleton (University of Utah); JUNG, Chulwoo (Brookhaven National Laboratory); CHRIST, Norman (Columbia University); GUPTA, Rajan (Los Alamos National Lab); VAN DE WATER, Ruth (Fermilab); PRELOVSEK, Sasa (University of Ljubljana); IZUBUCHI, Taku (Brookhaven National Laboratory)

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