EduPar-20 Invited Panel:
"Looking Back and Looking Forward: PDC, CS and Society"

Panelists: Henry A. Gabb, Andrew Lumsdaine, Margaret Martonosi, Arnold L. Rosenberg
Moderator: Martina Barnas

Abstract:
The panel is keeping with the "looking back and looking forward theme" of EduPar's 10th anniversary. Each panelist will briefly talk about some aspect of the past, and what they see as some of the big challenges for the future. This will serve as an introduction to a lively discussion, led by the panel, about future foci and challenges in PDC education. We invite panelists and audience participants to interpret future challenges and past efforts to be very broadly focused to include not only technical issues but also diversity, broadening participation, and societal and ethical issues as well.

Biographies:

Henry A. Gabb is a Senior Principal Engineer in Intel Architecture, Graphics, and Software. His prior positions include program manager for the Universal Parallel Computing Research Centers, a joint Intel/Microsoft initiative at UC Berkeley and the University of Illinois, and the Director of Scientific Computing at the US Army Engineer Research and Development Center MSRC. Henry holds a doctorate degree in molecular genetics from the University of Alabama at Birmingham School of Medicine, and a doctorate in information science from the University of Illinois at Urbana-Champaign. He has published extensively in computational life science and high-performance computing. Most recently, he is studying how the convergence of traditional high-performance computing, big data analytics, and artificial intelligence in modern workflows impacts system design.

Andrew Lumsdaine is Chief Scientist at the Northwest Institute for Advanced Computing (NIAC), where he serves as Laboratory Fellow at the Pacific Northwest National Laboratory and an Affiliate Professor in the Paul G. Allen School of Computer Science and Engineering at the University of Washington. His primary research interest is High Performance Computing, with a particular interest in scalable graph algorithms.

Margaret Martonosi is the US National Science Foundation's (NSF) Assistant Director for Computer and Information Science and Engineering (CISE). While at NSF, Dr. Martonosi is on leave from Princeton University where she is the Hugh Trumbull Adams '35 Professor of Computer Science. Her primary research interests are in computer architecture and hardware-software interface issues in both classical and quantum computing systems. Her work has included the widely-used Wattch power modeling tool and the Princeton ZebraNet mobile sensor network project.

Arnold L. Rosenberg is a Research Professor at Northeastern University, and a Distinguished University Professor Emeritus at the University of Massachusetts-Amherst. His main research focus is on developing algorithmic models and techniques to deal with the many new modalities of collaborative computing.

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