

SCD Colloquium

WED May 31, 2023, 16.00 h

Room: Auditorium WHGA/001

The Future of HPC Beyond Exascale

by John Shalf Lawrence Berkeley National Laboratory

Abstract:

Moore's Law is a techno-economic model that has enabled the Information Technology (IT) industry to nearly double the performance and functionality of digital electronics roughly every two years within a fixed cost, power and area. Within a decade, the technological underpinnings for the process Gordon Moore described will come to an end as lithography gets down to atomic scale. This talk provides an updated view of what a 2021-2023 system might look like and the challenges ahead, based on our most recent understanding of technology roadmaps. It also will discuss the tapering of historical improvements in lithography, and how it affects options available to continue scaling of successors to the first exascale machine.

Organized by:

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