

What I learned at BRNMMW 2018

David Lawrence - JLab

Oct. 30, 2018

Basic Research Needs for Microelectronics Workshop

Co-sponsored by ASCR, BES, HEP; October 23 – 25, 2018

Workshop Chair: Cherry Murray (Harvard Univ.)

Associate Chairs: Supratik Guha (ANL)
Dan Reed (Univ. of Utah)



SC Technical Lead: Andy Schwartz (BES)

CHARGE:

- To conduct a thorough assessment of critical scientific challenges, fundamental research opportunities, and priority research directions that require further study as a foundation for future advances in microelectronics for computing, communications, and sensing.
- Particular emphasis will be placed on areas that are aligned with the missions and needs of the Offices of Advanced Scientific Computing Research (ASCR), Basic Energy Sciences (BES), and High Energy Physics (HEP).
- This workshop should exclude topics directly related to Quantum Computing.

OUTLINE:

- Motivation for BRN workshop
- One-day Roundtable held in May 2018
 - Goals, Format, Output
- Planning for October BRN workshop



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Science

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 - Nuclear Energy
 - Energy transfer technology

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- We are in age of heterogeneous computing (accelerators, specialized hardware)

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- Co-Design (Materials Science -> HEP)