

# OSA Incubator on Optical Interconnects for Extreme-Scale Computing

9-11 August 2015

OSA Headquarters • 2010 Massachusetts Ave. NW • Washington, DC, USA

HOSTED BY:

**Keren Bergman**, Columbia University; **John Shalf**, Lawrence Berkeley National Laboratory

## DRAFT AGENDA

### Sunday, 9 August 2015

- Afternoon                    Arrival/Hotel Check-in  
    Hotel Palomar, 2121 P Street, NW, Washington, DC
- 18:00                          Welcome Dinner  
    Ezme, 2016 P St NW, Washington, DC

### Monday, 10 August 2015

- 8:00                          Breakfast  
    OSA Headquarters, 2010 Massachusetts Ave., NW
- 8:30                          Welcome Remarks - OSA**  
    Elizabeth Rogan, CEO, OSA
- 8:45                          Welcome and Incubator Goals**  
    Keren Bergman, Columbia University  
    John Shalf, Lawrence Berkeley National Laboratory
- 9:00                          Overview of DOE ECI Program & SBIR Investments**  
    Richard Carlson, Department of Energy
- 9:30                          **Introduce DOE Design Forward and Fast Forward programs and the  
DOE Advanced HPC platform acquisition teams (CORAL, and APEX)**
- APEX, System Requirements, Challenges & Opportunities for Photonics  
    John Shalf, Lawrence Berkeley National Laboratory
- CORAL, System Requirements, Challenges & Opportunities for Photonics  
    Al Geist, Oak Ridge National Laboratory

## **Monday, 10 August 2015, continued**

- 10:30** Coffee Break
- 11:00** **Panel: Exascale Vendors: Key Interconnect Technology Challenges**  
Moderator: *John Shalf, Lawrence Berkeley National Laboratory*  
Panelists: *Larry Dennison, NVIDIA*  
*David Dunning, Intel*  
*Marc Taubenblatt International Business Machines Corporation*  
*Raymond Beausoleil, Hewlett-Packard Labs*  
*William Brantley, Advanced Micro Devices United States*
- 13:00 Lunch, provided
- 14:00** **Photonics for Exascale - key challenges**  
*Keren Bergman, Columbia University, United States*
- 14:30** **Photonics Interconnects Technology Roadmap**  
TBD
- 15:00 Coffee Break
- 15:30** **Panel: Photonics Vendors: Technology Capabilities & Value Proposition**  
Moderator: *Keren Bergman, Columbia University*  
Panelists: *Richard Claus, NanoSonic Incorporated*  
*Gregory Fish, Aurrion, Incorporated*  
*Milan Mashanovitch, Freedom Photonics LLC*  
*Robert Vallance, nanoPrecision Products Incorporated*  
*Mark Wade, Ayar Labs*
- 17:30 Day 1 Wrap-up
- 18:00 Dinner  
Sette Osteria, 1666 Connecticut Ave NW, Washington, DC

## **Tuesday, 11 August 2015**

- 8:00 Breakfast  
OSA Headquarters, 2010 Massachusetts Ave NW, Washington DC
- 8:30** **Open Mic**  
*All participants have up to 5 minutes to present slides or provide a brief commentary on thoughts from day one or new directions*

**Tuesday, 11 August 2015, continued**

10:00 Coffee Break

**10:30 Program/Facilitated Discussion**

- 1. Prioritize challenges identified by HPC system architects.*
- 2. Identify benchmarks & technology targets to improve value of photonic technologies for exascale-class computing systems.*
- 3. Provide concrete targets to demonstrate that challenges are addressed.*

12:00 Lunch

13:00 Adjournment