AI for Science Town Hall
Renaissance DC Downtown Hotel, Washington, DC
October 22-23, 2019
Theme: What can we do in AI for Science to Move the Country Forward

<u>Tuesday, October 22, 2019</u>

7:30 a.m. **Registration and Working Continental Breakfast** (Ballroom Level Lobby)

8:30 a.m. **Welcome and Introduction** (Grand Ballroom North) …………..*Barbara Helland (DOE)*

8:45 a.m. **DOE HQ Opening Remarks** (Grand Ballroom North)………...…*Chris Fall (DOE)*

9:00 a.m. **Summary from 3 Town Halls…………………..** *Kathy Yelick (LBNL), Rick Stevens (ANL), Jeff Nichols (ORNL)*

10:00 a.m. **Break** (Ballroom Level Lobby)

10:30 a.m. **How significant will AI be for the energy sector? Quantifying progress and outlining signposts………………………………***Claire Curry, Bloomberg New Energy Finance*

11:15 a.m. **AI Research Update: What's Going On Around the World, And Our Research Plans For Studying AI for Science** ……………………………………*Earl Joseph, Hyperion Research*

11:45 a.m. **Break for Working Lunch** (Ballroom Level Lobby) - Networking and Preparation for Breakout Sessions

1:30 p.m. **Breakout Sessions** ………………………………………………………………………………………………..
- Machine Learning Foundations and Open Problems (Grand Ballroom North)
  Co-Leads:
  David Womble (ORNL)
  Stefan Wild (ANL)
  Prabhat (LBNL)
- Facilities Integration and AI Ecosystem (Meeting Room 3)
  Co-Leads:
  Jim Hack (ORNL)
  Mike Papka (ANL)
  Sudip Dosanj (LBNL)
  Inder Monga (LBNL)
- Earth and Environmental Sciences (Meeting Room 6)
  Co-Leads:
  Forrest Hoffman (ORNL)
  Rao Kotamarthi (ANL)
  Haruko Wainwright (LBNL)
- Chemistry, Materials, and Nano Science (Meeting Room 7)
  Co-Leads:
  Cynthia Jenks (ANL)

Bert deJong (LBNL)
- Engineering and Manufacturing (Meeting Room 8)
Co-Leads:
John Turner (ORNL)
Santanu Chaudhuri (ANL)
Peter Nugent (LBNL)
- Nuclear Physics (Meeting Room 9)
Co-Leads:
David Dean (ORNL)
Zein-Eddine Meziani (ANL)
Brian Quiter (LBNL)
- Data Life Cycle and Infrastructure (Meeting Room 10)
Co-Leads:
Arjun Shankar (ORNL)
Nicola Ferrier (ANL)
Wes Bethel (LBNL)
- Support for AI for Experimental Facilities (Meeting Room 16)
Co-Leads:
Ken Herwig (ORNL)
Doga Gursoy (ANL)
Peter Zwart (LBNL)

3:15 p.m.   **Break** (Ballroom Level Lobby)

3:30 p.m.   **Startup Innovations in AI Hardware** (Grand Ballroom North) **…………………………**PANEL
Moderator: Rick Stevens (ANL)
Andy Hock (Cerebras)
Kunle Olukotun (SambaNova)
Dale Southard (Groq)

4:30 p.m.   **Breakout Summary** (Grand Ballroom North) …………………………*Valerie Taylor (ANL),*
Barney Maccabe (ORNL), David Brown (LBNL)

5:00 p.m.   **Close-out for the day** (Grand Ballroom North) …………………………*Barb Helland (DOE)*

6:00 p.m.   **Dinner on your own**

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7:30 a.m.   **Registration and Working Continental Breakfast** (Ballroom Level Lobby)

8:30 a.m.   **Day 2 Welcome** (Grand Ballroom North) ………………………………..*Barb Helland (DOE)*

8:45 a.m.   **Breakouts**
- AI for Computer Science (Grand Ballroom North)
  Co-Leads:
  Nagi Rao (ORNL)
  Prasanna Balaprakash (ANL)
  Lavanya Ramakrishnan (LBNL)
- Biology and Life Sciences (Meeting Room 3)
  Co-Leads:
  Gina Tourassi (ORNL)
  Tom Brettin (ANL)
  Ben Brown (LBNL)
- High Energy Physics (Meeting Room 6)
  Co-Leads:
  Salman Habib (ANL)
  Paolo Calafiura (LBNL)
- Smart Energy Infrastructure (Meeting Room 8)
  Co-Leads:
  Teja Kuruganti (ORNL)
  Mihai Anitescu (ANL)
  Tianzhen Hong (LBNL)
- Software Environments and Software Research (Meeting Room 9)
  Co-Leads:
  Judy Hill (ORNL)
  Rob Ross (ANL)
  Katie Antypas (LBNL)
- Support for AI at the Edge (Meeting Room 10)
  Co-Leads:
  Steven Young (ORNL)
  Pete Beckman (ANL)
  John Wu (LBNL)
- Hardware Architectures (Meeting Room 16)
  Co-Leads:
  Jeff Vetter (ORNL)

Andrew Chien (ANL)
John Shalf (LBNL)

10:15 a.m. **Break** (Ballroom Level Lobby)

10:30 a.m. **DOE Headquarters Remarks** …………………………………………………Paul Dabbar, DOE

10:45 a.m. **Cross Agency AI Strategies** (Grand Ballroom North) **…………………***DoD, DOE, NSF, NIH*
       -Moderator – Lynne Parker (OSTP)
       -DOE – Steve Binkley
       -DOD NSA Research – Adam Cardinal-Stakenas
       -NSF – Erwin Gianchandani
       -NIH – Susan Gregurick

11:45   **Breakout Summary** (Grand Ballroom North) …………………………… *Valerie Taylor (ANL), Barney Maccabe (ORNL), David Brown (LBNL)*

12:15 p.m. **AI "Killer Applications"** (Grand Ballroom North) **…………………………** *Rick Stevens (ANL), Kathy Yelick (LBNL), Jeff Nichols (ORNL)*

1:00 p.m.   **Wrap Up** (Grand Ballroom North) **……………………………………** *Barb Helland (DOE)*

1:15 p.m.   **Working Lunch** *(*Ballroom Level Lobby) *………Continue Networking and Coordination of Town Hall Report*