

WEDNESDAY – APRIL 26

8:00 AM	Registration/Introduction to Sessions Breakfast Available (Terrace)
8:30 AM	<p>Session 3 Neuro-Inspired Computing Chair – Katie Lewis</p> <p><i>The Brain's Circuits Suggest Computing with High-Dimensional Vectors</i> Pentti Kanerva – University of California, Berkeley</p> <p>-----</p> <p><i>TrueNorth Ecosystem</i> Dharmendra Modha – IBM Corporation</p> <p>-----</p> <p><i>Exploring Neuromorphic Computing at Lawrence Livermore National Laboratory</i> Brian Van Essen – Lawrence Livermore National Laboratory</p>
10:00 AM	Break
10:30 AM	<p><i>Neural-Inspired Computing Algorithms and Hardware for Image Analysis and Cybersecurity Applications</i> Conrad James – Sandia National Laboratories</p>
11:00 AM	Panel Discussion
NOON	LUNCH ON YOUR OWN – NO AFTERNOON SESSIONS
5:00 PM to 8:00 PM	<p>Random Access Long House Sign up on-line at: http://salishan.ahsc-nm.org/2017RandomAccess.html</p>
8:00 PM	<p>Student Poster Session and Informal Discussions Council House</p>

STUDENT POSTER SESSION PARTICIPANTS

Ryan Bleile

University of Oregon, Eugene

Nikoli Dryden

University of Illinois at Urbana-Champaign

Simon Garcia De Gonzalo

University of Illinois Urbana-Champaign

Georg Hahn

Imperial College London

William Killian

University of Delaware

Sheng Lundquist

Portland State University

Ciaran Ryan-Anderson

University of New Mexico

Felix Wang

University of Illinois at Urbana-Champaign

Yuliana Zamora

University of New Mexico

THURSDAY – APRIL 27

8:00 AM	Registration/Introduction to Sessions Breakfast Available (Terrace)
8:30 AM	<p>Session 4 Quantum Computing Chair – Christoph Junghans</p> <p><i>Quantum High Performance Computing</i> Matthias Troyer - Microsoft</p> <p>-----</p> <p><i>Quantum Computing: Cladogenesis Beyond Exascale HPC</i> Andrew Landahl – Sandia National Laboratories</p> <p>-----</p> <p><i>Quantum Annealing at NASA: Current Status</i> Rupak Biswas – NASA Ames Research Center</p>
10:00 AM	Break
10:30 AM	<p><i>What to Do with More Than 1000 Quantum Bits</i> Scott Pakin – Los Alamos National Laboratory</p>
11:00 AM	Panel Discussion
NOON	Lunch: Council House
1:30 PM	<p>Session 5 Crosscutting Fragments Chair – Ron Brightwell</p> <p><i>128 Bit, Exascale Memory Reference Models for Next Generation, ExaByte Capacity Physical Memory Systems</i> Steven Wallach – Micron Technology, Inc.</p> <p>-----</p> <p><i>Cross-Stack Approximate Computing for Modern Applications and Future Substrates</i> Luis Ceze – University of Washington</p> <p>-----</p> <p><i>Probabilistic Computing in the Post-Moore's Era</i> Laura Monroe – Los Alamos National Laboratory</p>
3:00 PM	Break
3:30 PM	<p><i>Towards Always-On Integrated Performance Analysis Tools</i> Matthew LeGendre – Lawrence Livermore National Laboratory</p>
4:00	Panel Discussion
5:00	Informal Discussions Council House

*We hope you enjoyed the
2017 Salishan Conference on High Speed Computing!*

*Please complete our online survey:
<http://salishan.ahsc-nm.org/2017Survey.html>*

Next Conference Dates

April 23-26, 2018
April 22-25, 2019
April 27-30, 2020

At-a-Glance Agenda

The Salishan Conference on High Speed Computing



Perspectives on HPC's Current Cambrian Explosion

April 24-27, 2017

Salishan Lodge
Glenden Beach, OR

LOGISTICS

Conference sessions and the Random Access session will be held in the Long House Conference Center. Lunches and the working dinner will be held in the Council House.

For administrative support, please speak to Dee Cadena, Jan Susco, or Gloria Montoya-Rivera located in the registration area (Salal Room). If you have specific questions regarding audiovisual equipment or network connectivity, please seek out administrative support.

Visit our website at: <http://salishan.ahsc-nm.org>

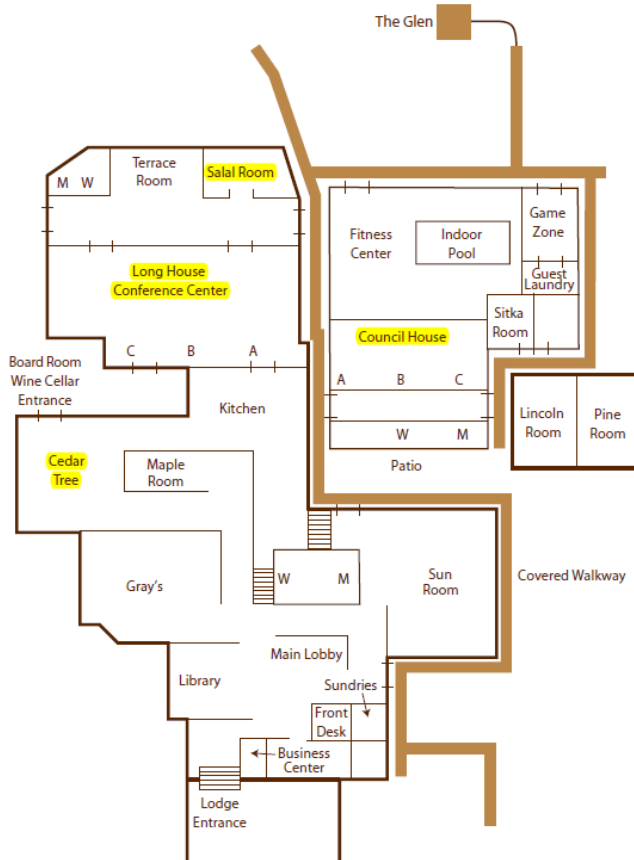
MONDAY – APRIL 24

4:30 PM	Registration Opens Salal Room
6:00 PM	Welcome/Keynote Address Long House <i>Bits, Qubits, Neurons: Their Connections and the Near Future of Computing</i> William Camp Camp Research
Immediately following Keynote Address	Reception and Informal Discussions Council House
7:00 PM	Registration Closes

TUESDAY – APRIL 25

8:00 AM	Registration/Introduction to Sessions Breakfast Available (Terrace)
8:30 AM	Session 1 Many-Core Computing – Application Challenges and Trinity/Cori Specifics Chair – Carolyn Connor <i>Intel's Many-Core Journey: Past, Present and Future</i> Alan Gara – Intel Corporation ----- <i>The Impact of Increasing Memory System Diversity on Applications</i> Gwen Voskuilen – Sandia National Laboratories ----- <i>Trinity Center of Excellence:</i> <i>"I Can't Promise to Solve All Your Problems, but I Can Promise You Won't Face Them Alone"</i> Hai Ah Nam – Los Alamos National Laboratory
10:00 AM	Break
10:30 AM	Many-Cores for the Masses – Moving the NERSC Workload to Knights Landing and Beyond Jack Deslippe – Lawrence Berkeley National Laboratory
11:00 AM	Panel Discussion
NOON	Lunch: Council House
1:30 PM	Session 2 Heterogeneous Computing – Application Challenges and Sierra/Summit Specifics Chair – Mark Gary <i>Portable Performance with OpenMP in a Heterogeneous Era</i> Tom Scogland – Lawrence Livermore National Laboratory ----- <i>Heterogeneous Computing Challenges & Directions</i> John Danskin – NVIDIA Corporation ----- <i>Principles of Porting Disorder Therapy for the HPC Clinician: An Introduction</i> Fernanda Foertter – Oak Ridge National Laboratory
3:00 PM	Break
3:30 PM	A Case for Intelligent (Co)-Design Sean Treichler – NVIDIA Corporation
4:00 PM	Panel Discussion
5:00 PM	Working Dinner/Speaker Council House <i>Winemaking: The Art and Science of Rotting Grapes to Perfection</i> James Osborne – Oregon State University Informal Discussions Cedar Tree Room (Immediately following Working Dinner)

MAIN LEVEL LODGE MAP



SPONSORS

One of the highlights of the conference are the informal discussions held each evening. These sessions help us to go beyond the formal presentations to exchange ideas, solve problems, and develop friendships. This year the following companies are helping to sponsor the evening informal discussion sessions:

Advanced Micro Devices, Inc.
ARM
Cray, Inc.
DDN Storage
D-Wave Systems, Inc.
Dell EMC
Hewlett Packard Enterprise
IBM Corporation
Intel Corporation
Micron Technology, Inc.
NVIDIA Corporation
Penguin Computing
Seagate Government Solutions

We would like to express our gratitude to these companies for their generous support!