Monday

7:30-8:30 Breakfast
8:30 intro/participants
5 minutes/person
10:15 Coffee

10:35 Energy-Performance Tradeoffs in Multilevel Checkpoint Strategies
Leonardo A. Bautista-Gomez, ANL

10:55 APIs, Architecture and Modeling for Extreme Scale Resilience
Kento Sato, LLNL

11:15 Portable Programming and Runtime Support for Application-Controlled Resilience
Andrew Chien, U Chicago/ANL

11:35 1. Open Discussion: "Of Apples, Oranges and (Non-)reproducibility" (Frank)
   API/resilience benchmarks

12:15-2:00 Lunch

2:00

2:00 MPI Fault Tolerance: The Good, The Bad, The Ugly
Martin Schulz, LLNL

2:20 Supporting the Development of Resilient Message Passing Applications
Christian Engelmann, ORNL

2:40 Fault Tolerance for Remote Memory Access Programming Models
Torsten Hoefler, ETH

3:00 Application level asynchronous checkpointing/restart: first experiences with GPI
Gerhard Wellein, Uni Erlangen

3:30 Break

3:50 2. Open Discussion: (Alexander)
HPC Resilience methods/MPI std/PGAS/map reduce+YARN

6:00 Dinner
After Dinner Discussion: "Watch Out: Grand Challenges in Resilience"

Tuesday

8:30 Operating System Support for Redundant Multithreading
Bjoern Doebel, TU Dresden

8:50 Resilient gossip algorithms for online management of exascale clusters
Amnon Barak, Hebrew U

9:10 FFMK: Towards a fast and fault-tolerant micro-kernel-based Operating System
Hermann Haertig, TU Dresden

9:30 3. Open Discussion: "Holistic Model" (Hermann)

10:15 Break

10:35 Memory Errors in Modern Systems
Vilas Sridharan, AMD

10:55 Fault Tolerance for Iterative Linear Solvers
James Elliott, NCSU+SNL

11:15 Scalable Fault Tolerance at the Extreme Scale
Zizhong (Jeffrey) Chen, UCR

11:35 3. Open Discussion: "Soft Errors" (Satoshi)

12:15-2:00 Lunch

2:00 Algorithms for coping with silent errors
Yves Robert, ENS Lyon & Univ. Tenn. Knoxville

2:20
Assessing the impact of composite strategies for resilience
George Bosilca, U Tennessee

2:40
Leveraging PGAS Models for Hard and Soft Errors at Scale
Abhinav Vishnu, PNNL

3:30 Coffee

3. Open Discussion: "Soft Errors" (Satoshi) continued (as necessary)

6:00 Dinner

cont. After Dinner Discussion: "Watch Out: Grand Challenges in Resilience"

Wednesday

Abstractions and mechanisms for proportional resilience
Mattan Erez, UT Austin

A Non-checkpoint/restart, Non-algorithm-specific Approach to Fault-tolerance
Dorian Arnold, UNM

Dynamic Resource Management and Scheduling for Fault Tolerance
Felix Wolf, GRS Aachen


12:15-2:00 Lunch