I/O
Peter Braam @Xyratex says

An framework like SQL for HPC data / big data is 40 years overdue

We will see radically new storage interfaces with
  – Distributed Containers with schemas
  – Stackable API’s including data management
  – Nothing like a file system
  – EIOW.org is workgroup exploring this
Parallel Programming
Peter Braam @ Parallel Scientific says

By 2020 C++, OpenACC etc. will be as assembly language compared to C

Because ....

- Irregular automatic parallelism is important
  - Maybe not in HPC. Many core is happening everywhere
- Communication and resiliency like in Erlang: 6 9’s
- Performance as in C
- Haskell is a candidate