Programming of Supercomputers

Assignment 2:
Parallel Debugging with TotalView

Prof. Michael Gerndt

Isaias A. Compres Urena

Schedule Updates

There are small change in the course's schedule:

- **Assignment 1:** Deadline extended by 2 working days due to SuperMUC maintenance
- **Assignment 2:** Its deadline remains the same; content scaled to 2 weeks.
  Deadline: 07.12.2017 @23:55
- **SuperMUC maintenance:** Make sure to subscribe to their mailing list and take these outages into account in your schedule

Assignment 1 Discussions

- After submissions we encourage you to interact
  - Compare your results among each other
  - Learn from each other's experience

Discussion:

- Postponed until next session since the deadline is extended

TotalView

- Commercial product from Rogue Wave Software
- GUI and CLI interfaces included
  - We will use the GUI
- Support for distributed memory applications with MPI
  - Allinea DDT also available (there are not many alternatives)
- Support for parallel codes with MPI and OpenMP
- Available in SuperMUC for all users
  - ‘totalview’ module
  - We have tested in Phase 1 thin nodes with IBM MPI only
    - https://www.lrz.de/services/compute/supermuc/access_and_login/
    - You can login with:
      ssh -YC sb.supermuc.lrz.de
    - TotalView was not working on Phase 2 nodes last year
      - You are welcome to try on Phase 2 and/or Intel MPI