

Annual Concurrency Forum

Welcome and Meeting Goals

CERN, 1-2th April 2014
P. Mato / CERN

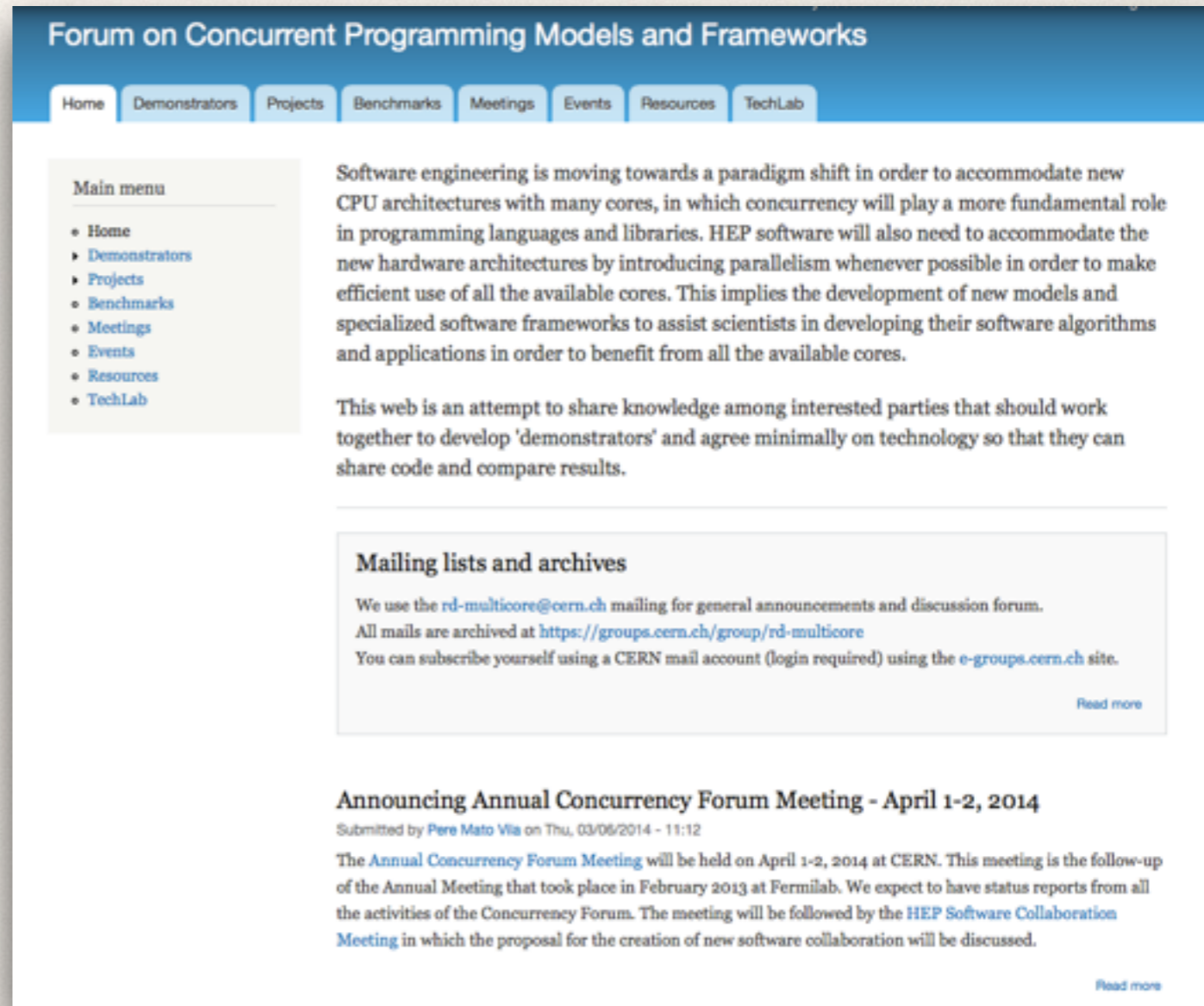
Welcome to the Third Annual Concurrency Forum Meeting

The **Concurrency Forum** was outcome of the first "Workshop on Concurrency in the many-Cores Era" held at Fermilab in November 2011 to explore the possibility that interested High Energy Physics (HEP) institutions and projects collaborate on concurrent frameworks and applications R&D

The function of the Forum is to communicate and exchange information and results

Concurrency Forum

- ❖ During the year we have had bi-weekly meetings with reports of the ongoing activities
 - ❖ GPUs
 - ❖ Multi-threading
 - ❖ Vectorization
 - ❖ New architectures
 - ❖ Tools
 - ❖ etc.
- ❖ The annual meeting is an opportunity to take stock and reflect what should be the next steps



The screenshot shows the homepage of the 'Forum on Concurrent Programming Models and Frameworks'. The page has a blue header with the forum title and a navigation bar with links for Home, Demonstrators, Projects, Benchmarks, Meetings, Events, Resources, and TechLab. A 'Main menu' sidebar on the left lists these same categories. The main content area features an introductory paragraph about the paradigm shift in software engineering towards multi-core architectures. Below this is a 'Mailing lists and archives' section with contact information and a 'Read more' link. At the bottom, there is an announcement for the 'Annual Concurrency Forum Meeting - April 1-2, 2014' with a 'Read more' link.

<https://concurrency.web.cern.ch>

Annual Meeting Goals

Discuss progress made with each demonstrator (area of R&D work), drawing **conclusions** for those that have completed and **identifying topics that still need to be investigated**

Get an update from each major project on its **current views on parallelism issues**, such as choice of concurrency model and software technologies

This should be an opportunity for us all to discuss and see if we can converge on a common overall strategy

Possibility of **launching common development projects** with specific deliverables that can be of benefit to the whole community

Sessions Organized by Topic

Today

- ❖ 0 - Welcome *John Harvey*
- ❖ 1 - Multi-threaded Frameworks *Jim Kowalkowski*
- ❖ 2 - Libraries and Toolkits for a Parallel world *Benedikt Hegner*

Tomorrow

- ❖ 3 - Co-processors, Accelerators and Vectorization *John Apostolakis
Philippe Canal*
- ❖ 4 - Technology Watch and Evaluations *Andrzej Nowak*
- ❖ 5 - Wrap-up *Pere Mato*

We should try to have short presentations and reserve at least 5 minutes at the end of each one for discussion

Logistics

- ❖ All sessions and coffee breaks will be held at “IT Amphitheater” (Building 31 / 3-004)
- ❖ Lunches can be taken at Restaurant 2 (just across the road) or Restaurant 1 (10 minutes walk)
- ❖ If you need any assistance feel free to send me or Ulla Tihinen (ulla.tihinen@cern.ch) an e-mail