CfP: 5th ALCHEMY workshop on Many-core programming (part of ICCS 2017)

Submitted by Anonymous on Mon, 02/06/2017 - 4:36pm

CALL FOR PAPERS

5th ALCHEMY Workshop - Architecture, Languages, Compilation and Hardware support for Emerging ManYcore systems

as part of ICCS 2017

12-14 June, 2017 | Zurich, Switzerland |
https://sites.google.com/site/alchemyworkshop/

Important Dates:

- Submission deadline (hard): 15th February, 2017
- Notification to authors: 10th March, 2017

As the future aims toward increasing parallelism and heterogeneity of systems to tackle the so-called power-wall while permitting a roadmap of increased performance, several challenges rise for programming such systems. The ALCHEMY workshop goal is to show some of these relevant challenges and finding ways to tackle them, while permitting programmers to focus on important part of application designs and letting compilers or runtime optimization do most of the work toward good performance.

The ALCHEMY workshop is the Many-core track of ICCS. It is also a good place of exchange between the traditional HPC domain of research and all the emerging HPES (High Performance Embedded Systems) domain, since the programming issues are mostly the same, with a relatively high cost of communication and the difficulty to program hundreds of cores often under performance and power usage constraints.

Original high quality submission are encouraged on all topics related to many-core programming issues including (but not limited to):

* Programming models and languages for many-cores
* Compilers for programming languages
* Runtime generation for parallel programming on manycores
* Architecture support for massive parallelism management
* Enhanced communications for CMP/manycores
* Shared memory, data consistency models and protocols
* New operating systems, or dedicated OS
* Security, crypto systems for manycores
* User feedback on existing manycore architectures
  (experiments with Adapteva Epiphany, Intel Phi, Kalray MPPA, ST STHorm, Tilera Gx, TSAR..etc)
* Many-core integration within HPC systems (micro-servers)

Authors should submit their paper through Easychair, using a maximum of 10 pages
(single column) Procedia style for full papers, or alternatively 2 to 4 pages for short papers (Poster and presentation, or presentation only).

Submission link:
https://easychair.org/conferences/submission_new.cgi?a=13543739
(paper templates are available on the submission page (top right)

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