The second talk, by Peter Puschner (Universitaet Wien, Austria Technische), was entitled Achieving Time Predictability in the MPSoC Age., and presented some key principles that must be followed when constructing the hardware and software architecture for embedded multi-core systems, if those systems are to be used in safety-critical or mixed-criticality applications. In the third talk, Raimund Kirner (University of Hertfordshire) presented the concept of mixed time-criticality, which allows describing different types of real-time system requirements, including service criticality, and described what types of performance specifications should be supported by the programming models. Finally, Kevin Hammond (University of St Andrews, UK) presented Predictable Timing Behavior on x86 Multicores using High-Level Patterns of Parallelism, showing that it is possible to accurately predict timing behaviour for real x86 multicores.

TECHNOLOGY TRANSFER IN COMPUTING SYSTEMS: THE TETRACOM APPROACH

This session introduced the new TETRACOM FP7 Project. The mission of the TETRACOM Coordination Action is to boost European academia-to-industry technology transfer (TT) in all domains of Computing Systems. While many other European and national initiatives focus on training of entrepreneurs and support for start-up companies, the key differentiator of TETRACOM is a novel instrument called the Technology Transfer Project (TTP). The TTP activities will be complemented by Technology Transfer Infrastructures (TTIs), which provide training, service, and dissemination actions. Altogether, TETRACOM is conceived as the major pilot project of its kind in the area of Computing Systems, acting as a TT catalyst for the mutual benefit of academia and industry. The project's primary success metrics are the number and value of coordinated TTPs as well as the amount of newly introduced European TT actors. The session featured three examples of successful TTPs: "An ultra-fast just-in-time-simulator" by Mike O´Boyle (University of Edinburgh), "From the FP6 Hartes project to BlueBee" by Koen Bertels (TU Delft) and "CoScale: from PhD to Product", by F. Ryckbosch (CoScale). The session finished with a short talk by Laurent Julliard (Kalray) presenting the industry viewpoint with a talk entitled "MPPA: what it takes to create and market a manycore processor".

DEPENDABILITY CHALLENGES

This thematic session aimed to increase awareness of dependability-related activity in EU funded projects, identify key challenges related to dependability, offer a forum for networking and exchange that fosters collaboration, and facilitate the formation of consortia for future research proposals. The session included invited presentations from seven projects related to dependability, each of which reported on the challenges they address, their interesting findings, and their current status. Two of the projects have recently completed, DIAMOND and EUROCLOUD, two are in progress, DESYRE and PARADIME, whereas RoMoL, BASTION and HARPA are either about to start or have recently kicked off. The projects covered a wide spectrum of problems and solutions spanning all layers of the compute stack. These include tools for error detection and diagnosis (DIAMOND), fault-tolerance for cloud servers (EUROCLOUD), hardware and software adaptation to battle permanent and transient faults (DESYRE), exploring energy-reliability trade-offs (PARADIME), leveraging task-based programming and a dataflow-based runtime for enhanced resiliency (RoMoL), battling aging and no failure found field returns (BASTION), and a cross layer approach to harnessing performance variability due to time-dependent variations (HARPA). Finally, we were pleased that two of the presentations were given by Estonian colleagues, helping to highlight the strong expertise of their institutions in the area of dependability.
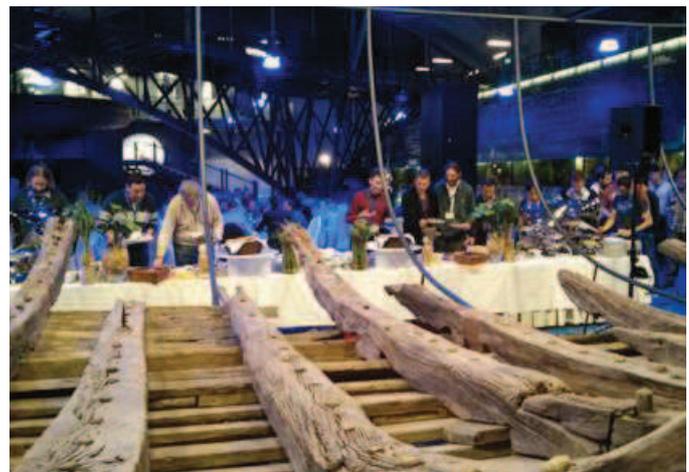
CSW social event in Tallinn

As a final note for this article, I just want to stress the importance of this HiPEAC-3 instrument to promote your research areas in the community, to share your own research results, and to build a network of researchers from which you can form a consortium for a future project proposal. Volunteering to organize a thematic session is an opportunity to contribute to the HiPEAC community, helping the HiPEAC network to work on the challenges identified in the **HiPEAC roadmap**. Being innovative in the organization of these sessions, escaping from the "traditional" format, will be very welcomed. Thanks in advance for submitting a proposal in the forthcoming calls for thematic sessions.

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