# 1ˢᵗ Workshop on "Enabling rapid and sustainable RISC-V based research using open source HW and SW"

(co-located with Design, Automation and Test in Europe) March 25-27, 2024, Valencia, Spain

## Call for Posters

**Open-source initiatives** are leading towards rapid prototyping of novel ideas and systems and unlocking from any specific vendor by empowering academic and industrial users to control, modify, and build upon existing technology. This workshop will bring both academic and industry members into a discussion about **open-source hardware (HW) and software (SW)** interests and showcase the potential of open-source technology with the **eXtendable Heterogeneous Energy-Efficient Platform, X-HEEP.** X-HEEP is an EU and **RISC-V-based** enabler platform for rapid and sustainable VLSI/ASIC system **design, automation, and testing**. Following the success stories of open-source projects in the SW ecosystem, with Linux kernel as the best example, X-HEEP aims to foster innovative, easy-to-integrate, easy-to-use ASIC-oriented technology. To this end, X-HEEP enables HW research and freely delivers **industrial-grade, silicon-proven open-source CPU IPs** from OpenHW. Together with our academic and industrial partners, this workshop will showcase the usage of X-HEEP for 1) SW engineers to deploy end-to-end applications, 2) HW engineers to integrate and evaluate their own IPs, and 3) system-level designers to architect a full system using its configurability and extendibility capabilities. To improve the discussion possibilities among junior and senior researchers, in this workshop, a Poster Competition is scheduled. We invite submissions on, but not limited to, the following topics:

- **Open-source SW applications (end-to-end)** being deployed into open-source Systems (SoC, NoC, SiP, etc)
- **Open-source HW Accelerators** integrated into open-source Systems (SoC, NoC, SiP, etc).
- **Open-source systems** (SoC, NoC, SiP, etc) offering extra versatility and configurability in comparison to COTS solutions.

A submission can describe a novel scientific result, provide a position statement about a new and relevant problem, or report a case study on practical experiences with a topic from the list above. The submissions should not be formally published in the past. The workshop will have no formal proceedings. Accepted posters can, at the discretion and with an approval of their authors, be published on the workshop's website.

**Author instructions:** Submissions in form of 1-page PDF file in Pentachart format (possible template in here) should be submitted through SoftConf:

https://softconf.com/date24/W07-X-Heep/

**Key dates:**
Submission deadline: ~~January 16, 2024~~ **February 5, 2024**
Acceptance notification: ~~January 22, 2024~~ February 14, 2024
Workshop: March 25-27, 2024 (precise half-day slot to be decided later)

**Registration:**
This workshop is co-located with the Design, Automation and Test in Europe Conference and will use its registration facilities. Please register through the DATE website: https://www.date-conference.com/registration. The early-bird deadline is January 24, 2024.

**Workshop organizers:**
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Jose Miranda, ESL, EPFL, Switzerland
Alfonso Rodríguez, CEI, UPM, Spain
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