

4TH WINTER SCHOOL ON OPERATING SYSTEMS (WSOS 2026)

16.-20. MARCH 2026

SCHLOSS ZELL AN DER PRAM, AUSTRIA

https://www.betriebssysteme.org/aktivitaeten/winterschools/wsos2026

"System Software Research in Europe – open, flexible, dependable, and built to last"

Modern system software must evolve rapidly and serve for decades. WSOS 2026 explores how Europe can build and rely on its own system stacks: not through slogans, but through engineering practices that make software open, adaptable, robust, and maintainable.

The GI Special Interest Group on Operating Systems (Fachgruppe Betriebssysteme) invites applications to WSOS 2026, a five-day residential winter school for early-career researchers, selected Mas-ter's students, and industry engineers. Set in a baroque castle in Upper Austria, WSOS blends deep technical sessions with hands-on labs, panels, and informal exchanges—ideal for building skills, col-laborations, and communities.

Tentative Speakers: Bernhard Aichernig, (JKU Linz) • Werner Haas, (Cyberus Technologies) • Felipe Huici, (Unikraft) • Adam Lackorzynski, (Kernkonzept) • Julia Lawall, (INRIA/Paris) • Viktor Leis, (TUM) • Alberto Lerner, (University of Fribourg) • Michael Roitzsch, (Barkhausen Institut) • Marcus Völp, (SnT)

TOPICS.

What we as a community can do now (and what's already underway):

- End-to-end open stacks: kernel, runtime, toolchain, and packaging that build reproduc-ibly; practical paths to replace opaque com-ponents (firmware, boot loaders, drivers) with open, verifiable alternatives.
- Upstream-first engineering: strategies for get-ting features into mainline kernels and core toolchains; minimizing long-term forks; gov-ernance and maintainer workflows.
- Interoperable interfaces that last: stable ABIsAPIs, conformance tests, and compatibil-ity layers that survive HW churn and vendor changes.
- Performance portability across architectures: techniques for multi-ISA support (x86-64, ARM, RISC-V, accelerators) and disaggre-gated setups (e.g., CXL-class memory, smart NICs) without vendor lock-in.
- Dependability at scale: verification, fuzzing, isolation, and supply-chain security for com-ponents we can audit and maintain locally.
- Sustainable maintenance: LTS strategies, re-lease engineering, CI on European testbeds, and reproducible artifacts that others can re-build years later.
- Ecosystem building: education, documenta-tion, artifact evaluation, and cross-lab collab-oration that lower barriers to entry for Euro-pean contributors.

PROGRAM

We offer lectures, experience talks, and hands-on sessions on open firmware efforts, veri-fied kernels and microkernels, container and virtualization stacks, storage and network, tool-chains, and packaging focused on reproducibility and longevity.

PARTICIPATION

WSOS aims at PhD students and early-career researchers in OS, systems, and adja-cent areas, as well as Master's students with strong systems backgrounds. We also invite indus-try engineers working on kernels, runtimes, virtu-alization, storage, networking, cloud/edge plat-forms. Attendance is limited to 50 persons to fos-ter interaction.

HOW TO APPLY

Apply by submitting a short motivation via the website: your interests and how your work connects to "open, flexible, dependable, built to last", and what you expect to learn.

ORGANIZATION

WSOS 2026 is organized by the GI Special Interest Group on Operating Systems (Fachgruppe Betriebssysteme) with support from academic and industry partners.



APPLICATION DEADLINE: 18.01.2026