

Preface

The 1st edition of the Zephyr in Science and Education (ZiSE 2025) was hosted by Navimatix GmbH and inovex GmbH in Jena, Germany. ZiSE 2025 was organized as a two-day event, featuring high-quality contributions across all education-related research areas in connection with Zephyr.

The conference brought together lecturers, educators, and researchers from universities across five countries to explore the role of the Zephyr RTOS in academic education, scientific research, and industry collaboration. Researchers and experts from academia and industry shared their insights on the potential of the use of Zephyr to provide students and start-ups with a quick interface for controlling and developing their hardware projects.

The program included a special session on “*What and how to teach Zephyr*”, covering topics such as Teaching OS concepts and Teaching Zephyr itself, applications in the maker scene and the Safety & Security aspects. A total of 10 papers were submitted for peer review, and 6 were selected for publication in the workshop proceedings.

We would like to express our sincere gratitude to all authors for their high-quality submissions, the program committee members for their thorough reviews. Our special thanks go to our opening keynote Speakers: **Steffen Späthe (Navimatix GmbH)**, **Nicole Pappler (Linux Foundation)**, **Stephan Linz (Navimatix GmbH)**, **Tobias Kästner (inovex GmbH)** and **Moritz Marquardt (Zeiss AG)**. We also thank the **Abbe School of Photonics** for providing the premises and technical equipment. Finally, we acknowledge the patronage of the Zephyr Project, founded as part of the Linux Foundation, as an official contributor of the Workshop and for their support.

We hope that these proceedings serve not only as a record of the high-quality discussions and research shared at ZiSE 2025, but also as an inspiration for educators, students and researchers to further explore the potential of Zephyr in education, research, and industry collaboration.

Program Committee

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