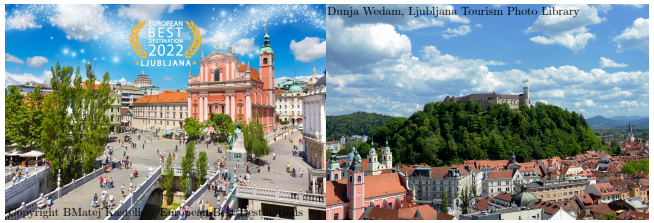
Event fee

The Conference fee is 430€ (early-bird 390€).
The Summer-school fee is 430€ (early-bird 390€).
The conference and summer-school fee is 790€ (early-bird 690€).
The fee includes lunch and refreshments during breaks, welcome conference reception and Conference / Summer school dinner.

Ljubljana - capital of Slovenia



Selected references on open-source effort

- SDyPy: Structural Dynamics Python.
- pyEMA: Python package for Experimental and operational modal analysis,
- FLife: Vibration Fatigue by Spectral Methods,
- pyExSi: Excitation signals as used in structural dynamics and vibration fatigue,
- pyFBS: a Python package for Frequency Based Substructuring, TPA, etc.,
- pyIDI: Python Image Displacement Identification.

Event chair

- Prof. dr. Janko Slavič

Session co-organizers

- Vibration fatigue: dr. Gunnstein T. Frøseth
- Structural Health Monitoring: dr. Wout Weijtjens
- High-speed camera structural identification: dr. Ivan Tomac,
- Substructuring: dr. Gregor Čepon,
- Rotordynamics: dr. Thiago G Ritto, Dr. Aldemir Ap Cavallini Jr,

Web page

ladisk.si/OpenSDconference.php

Join mailing list: tinyurl.com/OpenSD

Contact

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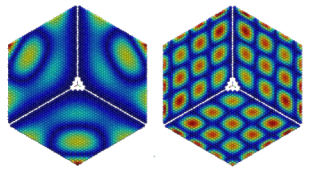
Open-source Scientific Computing in Structural Dynamics

Conference and Summer School

University of Ljubljana
Faculty of Mechanical Engineering

16–19 June, 2025
Ljubljana, Slovenia

OpenSD2025



Preliminary program

We are pleased to announce that the *Open-source Scientific Computing in Structural Dynamics Conference and Summer School* will be held in June 2025.

This conference and summer school is started to promote and accelerate open-source-based research in the field of structural dynamics.

Single-track presentations of open-source effort related to structural dynamics are planned for the first two days (Monday and Tuesday). While the Summer school (Wednesday, Thursday) will focus on open-source effort related to the Python programming language, other programming languages (e.g., Matlab) are welcome for the conference presentations

Topics of the conference:

- Mathematical Modeling
- Experimental Techniques
- Computational Methods
- Nonlinear and Stochastic Dynamics
- Structural Dynamics
- Acoustics
- Fluid-Structure Interactions
- Identification and Modal Analysis
- Dynamics of Rotating Systems
- Structural Health Monitoring
- Vibration Control and Isolation

The summer school will accept up to 15 attendees per track (first-come, first-serve basis).

CONFERENCE

Monday, day 1 Single-track presentations.
Welcome reception.

Tuesday, day 2 Single-track presentations. *Conference dinner.*

SUMMER SCHOOL

Wednesday, day 3: Summer school common track
Intro to Python, numerical methods, signal processing.
3h of lectures, 3h of hands-on work.

Summer school dinner.

Thursday, day 4, track 1: Vibration fatigue

3h of lectures, 4h of hands-on work.

Thursday, day 4, track 2: High-speed camera identification *3h of lectures, 4h of hands-on work.*

Thursday, day 4, track 3: Substructuring *3h of lectures, 4h of hands-on work.*

Thursday, day 4, track 4: Collaboration on open source projects *3h of lectures, 4h of hands-on work.*

Target audience

The target audience is PhD or MSc students working in the field of structural dynamics.

What to expect

At the conference, you can expect to learn about recent efforts in the development of particular open-source packages related to scientific research in structural dynamics.
At the summer school, we will help you understand how the open-source community operates and how to write open-source code so that it can be used by other researchers. Summer school attendees will receive the full source code of the courses.
Three tracks are planned (see preliminary program).

Attendees have the option to obtain 3 ECTS.

Prior knowledge

The summer school will be based on the Python programming language. Basic knowledge of Python is assumed, but Matlab users should be able to catch up quickly.

Important dates

- Feb 20th 2025: deadline for abstract submission.
- Mar 15th 2025: acceptance notification.
- Apr 15th 2025: deadline for extended abstract or full paper submission.
- Apr 15th 2025: early-bird registration closed.
- May 25th 2025: registration closed.
- June 16th 2025: conference start.
- June 18th 2025: summer school start.

Conference paper submission

To present your work at the OpenSD conference, first submit a 200-250 word abstract through the web page (ladisk.si/OpenSDconference.php).
The final conference contributions are expected in the form of 2-4 page extended abstracts, formatted using the provided LaTeX or MS Word template.