Session Program

Nov 4 - 5, 2025

Fortran Conference 2025

FortranCon 2025

Sessions

Virtual, ZOOM

Tue, November 4

9:20 AM **Sessions: Tools** Session | Location: Virtual, ZOOM | Convener: Alfio Lazzaro 09:20 – 09:40 Fortitude: A fast and friendly open-source linter for modern Fortran **Speaker** Liam Pattinson 09:40 - 10:10 Codee: A Tool to Enhance Correctness, Modernization, Security, Portability and Optimization in Fortran Speaker Manuel Arenaz 10:10 - 10:30 Fortuno: Flexible & extensible object oriented Fortran unit testing framework for serial, MPIparallel and coarray-parallel projects Speaker Dr Bálint Aradi 10:30 AM 10:50 AM **Sessions: Coding** Session | Location: Virtual, ZOOM | Convener: Austen Rainer 10:50 – 11:10 Simulating the Universe: My wish list after 20 years of Fortran development **Speaker Daniel Price** 11:10-11:30 Modern Fortran for Fluid-Structure Simulations of Cilia and Particles **Speaker** Divyaprakash Divyaprakash 11:30 - 12:00 Modernizing OpenRadioss: A Journey Through Three Decades of Fortran Evolution Speaker Mr Olivier Wienholtz 12:00 PM 6:00 PM **Sessions: Fortran and Python** Session | Location: Virtual, ZOOM | Convener: Dr Harvey Richardson 18:00 – 18:30 Gfort2py: A simple way to call Fortran from Python Speaker Robert Farmer 18:30 - 19:00 Interfacing Fortran and Python for ODE Modeling: A Performance Study on Ethylene **Dichloride Cracking**

Speakers Helianildes Silva Ferreira, Rodrigo Silva Ferreira 7:00 PM 7:20 PM **Sessions: Coding** Session | Location: Virtual, ZOOM | Convener: Brad Richardson 19:20 - 19:50 Precision-Agnostic BLAS/LAPACK and a Modern Linear Algebra API for the Fortran Standard Library Speaker Federico Perini 19:50 - 20:20 Using Modern Fortran OOP for the development of an open-source extensible library for thermodynamic calculations Speaker Federico Ezequiel Benelli

20:20 – 20:50 Experiences with Idiomatic Vibe Coding

8:50 PM

Dr Damian Rouson

Speaker

Wed, November 5

9:10 AM **Sessions: Coding** Session | Location: Virtual, ZOOM | Convener: Arjen Markus 09:10 – 09:40 From Fortran to Fortran: The Porting Guide **Speaker** Igor Gerasimov 09:40 – 10:00 Practical performance benefits of the Fortran PURE keyword in a CFD solver Speaker Dr Paul Bartholomew 10:00 – 10:20 State of the FOSS (Fortran Open Source Software) Speaker **David Cutting** 10:20 AM 10:40 AM **Sessions: Compilers** Session | Location: Virtual, ZOOM 10:40 – 11:10 Fortran, the OpenMP API, and AMD GPUs - Porting Applications for Performance **Speaker** Michael Klemm 11:10–11:30 Status of gfortran, the gcc fortran compiler Speaker **Paul Thomas** 11:30 – 12:00 Fortran - What are the options for accelerated computing? **Speaker** Hans Pabst 12:00 PM 5:30 PM **Sessions: Coding** Session | Location: Virtual, ZOOM | Convener: Tiziano Müller 17:30 – 17:50 Compile-time unit checking in Fortran with genunits Speaker Ben Trettel 17:50 - 18:10 (Let's) make Fortran spatial again: Re-establishing Fortran as a language for spatial analysis Speaker Prof. Oscar Garcia-Cabrejo 18:10–18:30 Parallel Monte Carlo and Machine Learning Tools for Fortran

