3rd Annual SU2 Developers Meeting

September 16th-18th, 2018 University of Strathclyde, Scottish Universities Insight Institute (SUII) Glasgow, Scotland, UK



The Open-Source CFD Code

Meeting Agenda for Sunday September 16th

0900 - 0915: Welcome & Agenda

0915 - 1045: Introduction to developing in SU2: Covering high level class design, how to modify the code, working with GitHub (branching, PRs, regressions), etc.

1045 - 1615: Hack session: Separate groups working on various problems (lunch and snacks/coffee offered in the room while working)

1615 - 1700: Wrap-up Presentations: Two-slide presentations on major progress for the day, including discussion

1730 - open: Social at "The Counting House", 2 St Vincent Place, G1 2DH

Meeting Agenda for Monday September 17th

0800 – 0830: Welcome & Year in review, T. Economon (Bosch), J.J. Alonso (Stanford)

0830 – 0900: SU2-NEMO - Thermochemistry and high-Mach aerothermodynamics, <u>M. Fossati</u> (U. of Strathclyde), T. Magin, J.B. Scoggins, M. Pini, P. Colonna, R. Sanchez, T. Economon, D. Mayer, N. Beishuizen, C. Garbacz-Gomes, W.T. Meier, J.J. Alonso, T. van der Stelt

0900 - 0930: Toward optimization for reactive flows in SU2, N. Beishuizen (Bosch), D. Mayer, T. Economon

0930 – 1000: Conjugate heat transfer problems and computing coupled discrete adjoints using AD, O. Burghardt (TU Kaiserslautern), T. Albring, N. Gauger

1000 - 1030: Coffee break

1030 – 1100: Physics-based RANS model-form UQ in SU2, J. Mukhopadhaya (Stanford), A. Mishra, J.J. Alonso, G. laccarino

1100 - 1130: Aeroacoustics in SU2, B. Zhou (NIA/NASA), C. Ilario, S. Nimmagadda, E. Molina

1130 – 1200: Higher-order SU2: DG-FEM solver and WENO-FV solver with LES/ILES/WMLES applications, <u>E. van der Weide</u> (U. of Twente), J.J. Alonso, D. Drikakis, K. Singh, P. Urbanczik, E. Molina, J.H. Choi

1200 - 1300: Lunch

1300 – 1330: Unsteady optimization with SU2: application to turbomachinery design, A. Rubino (TU Delft), M. Pini, N. Anand, P. Colonna

1330 – 1400: Preliminary results on rotor-fuselage aerodynamics using SU2: status and challenges, M. Morelli (Politecnico di Milano), G. Gori, A. Guardone

1400 – 1430: Anisotropic mesh adaptation with the INRIA AMG library, A. Loseille (INRIA), V. Menier, B. Munguia, J.J. Alonso

1430 - 1500: Coffee break

1500 – 1530: Simulation and adjoint-based design for variable density incompressible flows with heat transfer, <u>T. Economon</u> (Bosch)

1530 – 1600: Implementation of pressure-based Navier-Stokes for wind energy applications, A. Ravishankara (ECN part of TNO), H. Ozdemir, E. van der Weide

1600 – 1630: SU2-IDS: International Developers Society, <u>T. Albring</u>, <u>R. Sanchez</u> (TU Kaiserslautern), T. Economon, F. Palacios

1630 – 1700: Wrap up, *J.J. Alonso* (Stanford)

In order to participate (in-person or virtually), please register for the meeting by following the link on the SU2 home page (https://su2code.github.io).

*Please note that all stated times are British Summer Time (BST). **The presenter author is underlined



















