## 3<sup>rd</sup> Annual SU2 Developers Meeting

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

## Meeting Agenda of 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 of Monday September 17th

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

**0830 – 0900:** <u>SU2-NEMO - Thermochemistry and high-Mach aerothermodynamics, 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. Iaccarino

**1100 – 1130:** <u>Aeroacoustics prediction and optimization capabilities in SU2</u>, B. Zhou (NIA/NASA-Langley), T. Albring, N. Gauger, C. Ilario, T. Economon, J.J. Alonso, L. V. Lopes, H. Yao, S. Peng, L. Davidson

1130 – 1200: <u>Higher-order SU2: DG-FEM solver and WENO-FV solver with LES/ILES/WMLES applications</u>, <u>E. van der Weide</u> (U. of Twente), J.J. Alonso, D. Drikakis, K. Singh, P. Urbanczyk, 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, T. Economon (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:** <u>SU2-IDS: International Developers Society</u>, <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 (<a href="https://su2code.github.io">https://su2code.github.io</a>).

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

















