

Prof. Paul G. Tucker

Title of Talk: Predictive aerothermal modelling in aeronautics

Paul G. Tucker (PGT) is the Rank Professor of Engineering at the University of Cambridge. Paul Tucker completed a Royal Society Industry Fellowship to support working at Rolls-Royce (40% of his time for 4 years). A key element of this Fellowship was developing a Large Eddy Simulation (LES) capability. He has written around 500 journal papers, conference papers, and technical reports. The vast majority of his research has been in the area of turbulence. Paul has been a visiting researcher at NASA Langley and Boeing Commercial Airplanes, Seattle. He has recently written two books - see Tucker (2013,2016) - and a Royal Society Theme Issue (see Tucker and DeBonis (2014)). The latter largely explores the future use of LES in industry. Paul Tucker is an Associate Fellow of the AIAA. He is also an associate editor for the AIAA Journal - the world's leading aerospace journal. He has been a guest Editor for Phil. Trans Royal Society three times. His most recent award was from the ASME, in 2013, for a best paper on turbomachinery LES work exploring complex transition mechanisms. He has extensive experience of high performance computing.



Tucker P.G. (2013) *Unsteady computational fluid dynamics in aeronautics*, Springer, ISBN 978-94-007-7048-5.

Tucker P.G. & DeBonis J. (2014) Introduction: Aerodynamics, Computers and the Environment, *Philosophical Transactions of the Royal Society (Series A: Mathematical, Physical and Engineering Sciences)*, Vol. 372, pp 1-5.

Tucker P. G. (2016) *Advanced computational fluid and aerodynamics*, Cambridge University Press.