

SESSION IN HONOR OF PROF. RAINALD LOHNER 60TH BIRTHDAY

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MINI-SYMPOSIUM PROPOSAL

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1 BACKGROUND

Dr. Rainald Lohner is a Distinguished Professor and Director of the Center for Computational Fluid Dynamics in the Department of Physics and Astronomy at George Mason University in Fairfax, Virginia, USA. Prof. Lohner received his Diplom Ingenieur, Maschinenbau from TU Branschweig Germany in 1982, and his PhD in Civil Engineering from the University of Wales, Swansea UK in 1985. Prof. Lohner has had a tremendous impact and pioneered work in the broad area of Computational Mechanics, including development of advanced simulation methods as well as applications of computer simulations in a wide variety of fields.

2 PURPOSE

The purpose of this mini-symposium / session will be celebrate Prof. Lohner's 60th birthday by gathering researchers that have collaborated, worked, befriended Prof. Lohner, or have been influenced by his work. In particular, the session will focus not only on what has been achieved in diverse areas of Computational Mechanics but also on the challenging problems that need to be solved in the future. We will invite presentations summarizing the state of the art and providing a vision for future developments in the wide variety of fields that fall under the interest of Prof. Lohner. Subjects will include: field solvers based on unstructured grids, unstructured grid generation and computational geometry, fluid-structure interaction and coupled problems, pre- and post-processing, particle methods, optimal shape and process design, high performance computing, as well as applications in areas such as pedestrian flows and crowd dynamics, free-surface flows, urban and atmospheric flows, biomedical applications, and blast analysis.