Press Release

EDAA Lifetime Achievement Award 2015 goes to Lothar Thiele

Leuven, Belgium, February 28, 2015 – The EDAA Lifetime Achievement Award 2015 goes to Lothar Thiele.

The EDAA Lifetime Achievement Award is given to individuals who have made outstanding contributions to the state of the art in electronic design, automation and testing of electronic systems during their career. In order to be eligible, candidates must have made innovative contributions which had an impact on the way electronic systems are being designed.

Past recipients are: Kurt ANTREICH (2003), Hugo DE MAN (2004), Jochen JESS (2005), Robert BRAYTON (2006), Tom WILLIAMS (2007), Ernest KUH (2008), Jan RABAEY (2009), Daniel GAJSKI (2010), Melvin BREUER (2011), Alberto SANGIOVANNI-VINCENTELLI (2012), Peter MARWEDEL (2013) and Rolf ERNST (2014).

The Award will be presented at the plenary session of the 2015 DATE Conference, to be held March 9-12 in Grenoble, France (http://www.date-conference.com).

Prof. Dr. Lothar Thiele received the Diplom-Ingenieur and Dr.-Ing. degrees in Electrical Engineering from the Technical University of Munich, Germany. After completing his Habilitation thesis from the Institute of Network Theory and Circuit Design of the Technical University Munich, he joined the Information Systems Laboratory at Stanford University, USA. In 1988, he took up the chair of microelectronics at the Faculty of Engineering, University of Saarland, Saarbrucken, Germany. He joined ETH Zurich, Switzerland, in 1994, till today. He received multiple awards and has been elected member of several academies, such as the German Academy of Sciences Leopoldina and the Academia Europaea.

In his research work in the late 80s and early 90s, he investigated the design automation of massively parallel VLSI processor arrays. His focus has continued on design automation, but broadened to embedded software and design optimization techniques for networked embedded systems. In this area, his bio-inspired evolutionary algorithm optimization techniques have been used by scientists and industry around the world and are applicable not only to embedded system optimization, but to discrete multi-objective optimization problems in general. His papers on these techniques, their theoretical analysis in terms of convergence proofs as well as benchmarking problems are having an enormous impact in the field.

As embedded systems are increasingly parallel and distributed, Dr. Thiele has been pioneering the design of predictable computing and communication systems in various respects. He invented an innovative analysis technique named real-time calculus that allows to provide hard bounds on essential quantities like memory, temperature and timing. The underlying concepts have shaped the way how the embedded systems, real-time and embedded software communities look at system design. The fundamental nature of these discoveries become clear in the exploitation of these techniques in the direction of temperature guarantees in multi-core systems, mapping algorithms to multi-processor systems on a chip, mixed-criticality systems for automotive and avionics applications, as well as the design and continuous operation of dependable distributed sensor networks for environmental science and warning systems.