## DISTINGUISHED MECHANICAL ENGINEERING SEMINAR Friday, January 6, 2017

10:30 am-12 pm Room 102 D



**Professor Detlef Lohse** University of Twente Chair of Physics of Fluids Group <u>http://pof.tnw.utwente.nl</u>

**Abstract:** In this talk I will describe and explain several simple experiments in which phase transitions in and around single droplets and bubbles play an important role. The talk will cover vapor bubbles and freezing and boiling droplets, on cold and hot surfaces, and in cold and hot surrounding liquid, showing beautiful and often unexpected phenomena.

**Biography:** Detlef Lohse holds the Physics of Fluids chair at the University of Twente, the Netherlands, to which he was appointed in 1998 at age 35. Hereceived a doctorate in Physics in 1992 from the University of Marburg Germany) followed by a post-doctoral period at the University of Chicago. His areas of interest include, among others, turbulence, natural convection, drops, bubbles and bubbly flows, phase change and microfluidics. Professor Lohse is one of the world's leading fluid mechanicians with well over 400 refereed papers to his name and an h-index approaching 60. He has been a member of the editorial board of the Journal of Fluid Mechanics since 2007 and serves on the boards of several other major journals as well. He has given dozens of invited and plenary lectures at major international conferences and received many major awards including the George K. Batchelor Prize (Fluid Dynamics Prize) of the International Union of Theoretical and Applied Mechanics (IUTAM) in 2012. He is a fellow of several societies and a member, among others, of the Royal Dutch Academy of Science, the Royal Holland Society of Sciences and Humanities and the Max Planck Society. He was knighted by the Dutch Queen in 2010.