

# NGSSC Summer School on Computational Electromagnetics

**Chalmers University of Technology  
June 8-17 2009**

The purpose of the summer school is to cover the most influential methods in the field of Computational Electromagnetics today, where we provide both a theoretical and an application oriented perspective on the state-of-the-art in this field of research. Thus, we will cover the finite element method, the finite-difference time-domain scheme and the method of moments. In particular, we focus on accelerated versions of the method of moments, which is also referred to as the boundary element method in the applied mathematics community. As a distinguished lecturer, we feature Professor Levent Grel who is the director of the Computational Electromagnetics Research Center (BiLCEM), Bilkent University, Turkey. Professor Grel also worked for many years at the world-leading Center for Computational Electromagnetics and Electromagnetics Laboratory at the University of Illinois at Urbana-Champaign, under the direction of Professor Weng Cho Chew.

Lectures on Computational Electromagnetics in a more general setting will be presented during the first week. The afternoons are mainly devoted to the solution of computational exercises in small groups. Lectures on techniques for large scale problems and some grand challenges will be given by Professor Grel in the second week of the summer school. Groups of students and the experts will work together on the solution of the problems. PhD students can receive credit for the summer school at their home departments.

The summer school is mainly intended for PhD students in electrical engineering, applied mathematics, numerical analysis, scientific computing and computational physics. The course will be held at Chalmers University of Technology in Göteborg during the period June 8-17, 2009.

**Applications** for this summer school, or questions regarding the summer school, are sent to Thomas Rylander at the e-mail address:

**rylander@chalmers.se**

The summer school is financed by the National Graduate School in Scientific Computing (NGSSC). For further information, please visit the home page of NGSSC: [www.ngssc.vr.se](http://www.ngssc.vr.se)