

UNIVERSITY OF CRETE
DEPARTMENTS OF MATHEMATICS AND APPLIED MATHEMATICS

ANALYSIS SEMINAR

12:30pm, Tuesday, 23 May, 2017
Room A-303

Dirk Pauly, *Universität Duisburg-Essen*

Maxwell equations, and their solutions. Some characteristic examples

We will give a simple introduction to Maxwell equations. Concentrating on the static case, we will present a proper L^2 -based solution theory for bounded weak Lipschitz domains in three dimensions. The main ingredients are a functional analysis toolbox and a sound investigation of the underlying operators gradient, rotation, and divergence. This FA-toolbox is useful for all kinds of partial differential equations as well.