### DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE UNIVERSITY OF SOUTHERN DENMARK, ODENSE

## Mathematics seminar

## Ulrich Pennig University of Muenster

# **Deformations of nilpotent groups and homotopy symmetric C\*-algebras**

## Thursday 3 December 2015, 14:15-16:00 IMADA seminar room

#### Abstract

The homotopy symmetric C\*-algebras are those for which one can unsuspend in E-theory. In joint work with Marius Dadarlat we develop a new condition that characterizes homotopy symmetric nuclear C\*-algebras. It can be used to show that the property of being homotopy symmetric passes to nuclear C\*-subalgebras and it also implies a number of other significant permanence properties. Using this new approach, one can show that the augmentation ideal I(G) of a countable discrete torsion free nilpotent group G is homotopy symmetric.