

## **Mathematisches Kolloquium**

## Classification of L<sup>p</sup> AF algebras

## Prof. Maria Grazia Viola

Lakehead University, Kanada

Abstract:

 $L^p$  operator algebras were introduced quite recently by N.C. Phillips. They have a rich and interesting theory, and several fundamental results which exist for C<sup>\*</sup>-algebras, have been shown to be satisfied also in the  $L^p$  operator algebra setting. In the talk I will briefly introduce  $L^p$  operator algebras, and then focus on one of these results, the classification of  $L^p$  AF algebras using the K<sub>0</sub> group. I will define the K<sub>0</sub> group in terms of equivalence classes of idempotents belonging to certain matrix algebras. If time allows it, I will describe the structure of ideals of any  $L^p$  AF algebra, by showing that the ideals of an  $L^p$  AF algebra are in one-to-one correspondence with the order ideals of the K<sub>0</sub> group.

Donnerstag, 14.02.2019, KG I/Bau A 103, 15.30 Uhr s.t.

MATHEMATISCH-GEOGRAPHISCHE FAKULTÄT