

**UNIVERSITY OF HOUSTON
DEPARTMENT OF MATHEMATICS**

Analysis Seminar

David Blecher

University of Houston

Conditional expectations, classical and non-commutative

1:00 pm in 646 PGH

August 30, 2019

Abstract

Just the last part of this talk will be new research of the speaker, from two papers joint with L. E. Labuschagne, L. Flores (MSc student), and B. Zimmer. This semester in the analysis seminar, as we have sometimes done in the past, we will have some talks by local speakers that are partly expository to teach some aspects of the subject to graduate students and nonexperts. We begin by describing some main results about classical conditional expectations on L_p spaces, and how to prove them. Then we generalize to von Neumann algebras relying on seminal work of U. Haagerup and others). Finally (in the new work) we generalize still further to general operator algebras, and give new Hahn-Banach extension theorems in this setting.