
RAPHAEL CLOUATRE, University of Manitoba

Non self-adjoint Exel–Loring approximations and residual finite-dimensionality

An operator algebra is said to be residually finite-dimensional (RFD) if it is completely normed by its finite-dimensional representations. For C^* -algebras, several characterizations of this property are known. In this talk, we will focus on one such characterization obtained by Exel and Loring, which says that every representation can be approximated by a finite-dimensional one in some appropriate topology.

Is there a non self-adjoint version of this characterization? We illustrate how the answer appears to be sensitive to the particular choice of topology, unlike in the C^* -algebra setting. In doing so, we relate the question to the fact that the maximal C^* -cover is RFD. This is joint work in progress with Adam Dor-On.