COLLOQUIUM

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Toeplitz Separability, Entanglement, and Complete Positivity via Operator System Duality



Date: Friday November 4, 2022 Time: 3:30 PM Room: RI 208

Abstract: A recent duality theorem of Connes and van Suijllekom, when formulated for the operator system category, casts light on some phenomena related to finite Toeplitz matrices, including the structure of linear isometries, automatic complete positivity, and the separability of positive block Toeplitz matrices. The key lies in the duality theorem, which I shall explain in this lecture, and on the theory of extremal completely positive linear maps on unital C*-algebras with values in the type I factor B(H).

This lecture is based on collaborative work with Michelle McBurney.

