
HEYDAR RADJAVI, University of Waterloo, Waterloo, Ontario

An Approximate Version of Specht's Theorem

Specht's theorem states that two complex matrices are unitarily equivalent if and only if all traces of words in two noncommutative letters applied to the pairs (A, A^*) and (B, B^*) coincide. In joint work with Laurent Marcoux and Mitja Mastnak, we study an approximate version of this trace hypothesis and obtain conditions that allow us to extend this theorem to simultaneous similarity or unitary equivalence of families of operators.