

ON MULTIPLICITY OF SPECTRUM FOR ANDERSON TYPE OPERATORS WITH HIGHER RANK PERTURBATIONS

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Abstract. Here, we focus on Anderson type operators over infinite graphs where the randomness acts through higher rank perturbations. We show that for special family of graphs, the operator has non-trivial multiplicity for its pure point spectrum. We, also, show that for some family of graphs, any unitary which fixes the random operator, arising from an automorphism of the graph is identity; but that, for these graphs the spectrum of the random operator has non-trivial multiplicity.

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