



Mathematical Physics

Resolutions of Identity for Some Non-Hermitian Hamiltonians. II. Proofs

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This part is a continuation of the Part I where we built resolutions of identity for certain non-Hermitian Hamiltonians constructed of biorthogonal sets of their eigen- and associated functions for the spectral problem defined on entire axis. Non-Hermitian Hamiltonians under consideration are taken with continuous spectrum and the following cases are examined: an exceptional point of arbitrary multiplicity situated on a boundary of continuous spectrum and an exceptional point situated inside of continuous spectrum. In the present work the rigorous proofs are given for the resolutions of identity in both cases.

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