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Short title: A non-Hermitian Hamilton operator and the physics of open quantum systems.

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Review text:

Ingrid Rotter is the author or coauthor of 51 papers listed among the references attached to these compact 50 pages of her topical review text devoted to physics of open quantum systems. As a top-quality specialist in nuclear physics she found a fortunate unifying idea of her rather sketchy account of numerous aspects of these systems in the well known Feshbach's trick which characterizes the operators of quantum observables (mainly, Hamiltonians) in terms of their projections from the full Hilbert space to a certain suitable subspace (here, mainly, excluding a spatially remote "environment"). Globally, her text should be perceived as a quick, deeply intuitive guide or map of the extensive terrain of various openness-related phenomena investigated by many physicists, mainly, during the last cca ten years. In the section of Acknowledgements she herself thanks, after all, to as many as 23 of her coauthors or collaborators or discussion partners contacted during this period of time. Only too many topics are touched to be listed here – let us just mention their sampling by the 14 reproductions of Figures, all of which were taken from her own older publications devoted to various concrete toy models. Thus, the readers should actually be advised to turn their attention also to the original, more detailed papers whenever they happen to feel addressed and/or interested.