1. Record Nr. UNINA9910964406903321

Autore	Hitrik Michael
Titolo	Adiabatic Evolution and Shape Resonances
Pubbl/distr/stampa	Providence : , : American Mathematical Society, , 2022 ©2022
ISBN	9781470472801 1470472805
Edizione	[1st ed.]
Descrizione fisica	1 online resource (102 pages)
Collana	Memoirs of the American Mathematical Society ; ; v.280
Classificazione	35B3435J1035P2035S05
Altri autori (Persone)	MantileAndrea SjostrandJ (Johannes)
Disciplina	515/.7242 515.7242
Soggetti	Mathematical physics Adiabatic invariants Partial differential equations -- Qualitative properties of solutions -- Resonances Partial differential equations -- Elliptic equations and systems -- Schrodinger operator Partial differential equations -- Spectral theory and eigenvalue problems -- Asymptotic distribution of eigenvalues and eigenfunctions Partial differential equations -- Pseudodifferential operators and other generalizations of partial differential operators -- Pseudodifferential operators
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	"Motivated by a problem of one mode approximation for a non-linear evolution with charge accumulation in potential wells, we consider a general linear adiabatic evolution problem for a semi-classical Schrodinger operator with a time dependent potential with a well in an island. In particular, we show that we can choose the adiabatic parameter with ln , where h denotes the semi-classical parameter, and get adiabatic approximations of exact solutions over a time interval of length N with an error O(). Here N 0 is arbitrary"--