

On the absolutely continuous spectrum of generalized indefinite strings

Aleksey Kostenko (Uni Wien)

Abstract. Our main result is the stability of the absolutely continuous spectrum of two model examples of strings under rather wide classes of perturbations. In particular, this enables us to prove that the absolutely continuous spectrum of the isospectral problem associated with the conservative Camassa-Holm flow in the dispersive regime is essentially supported on the interval $[1/4, \infty)$ for the entire natural phase space. If time permits, applications to quantum graphs and 1D Hamiltonians with δ' -interactions will be discussed as well.

The talk is based on joint work with J. Eckhardt (Loughborough, UK).

Mathematical Physics Seminar

27.11.2018, 11:30

1090 Wien, Oskar-Morgenstern-Platz 1, Besprechungszimmer 2nd Floor