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Imbedded Singular Spectrum for Schrödinger Operators

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Abstract. We will review recent results on the imbedded singular spectrum. This will include examples with a dense set of imbedded eigenvalues, and examples where wave operators exist but are not asymptotically complete due to the presence of a singular continuous spectrum. We will also discuss estimates on the size of the set where the singular spectrum may be supported, which can be thought of as nonlinear versions of well-known estimates for the Fourier transform.