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Parametrization of scattering data using genetic algorithm

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Abstract content
 (Max 300 words)

The problem of extracting spectral points (bound and resonant states) from scattering data, obtained experimentally or theoretically, is addressed. A new fitting strategy, incorporating an evolution algorithm, is outlined. The fitting parameters are the coefficients of a semi-analytical expression derived from the multi-channel Jost-matrix done near an arbitrary point on the Riemann surface. The efficiency and accuracy of the suggested expansion and fitting is demonstrated by an example of a one-channel model.

Apply to be
 consider for a student
 award (Yes / No)?

Yes

Level for award
 (Hons, MSc,
 PhD)?

PhD

Main supervisor (name and email)
and his / her institution

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Would you like to
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Yes

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