

Precise determination of the sigma pole from a dispersive analysis

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The values quoted in the Particle Data Table for the pole position of the σ are very widely spread. Recent precise data on pion-pion scattering, together with the use of dispersion relations and Roy's equations allow us to determine the pole position very precisely, by using only experimental input. In addition, we use a new set of Roy-like equations with only one subtraction, which will improve uncertainties.

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