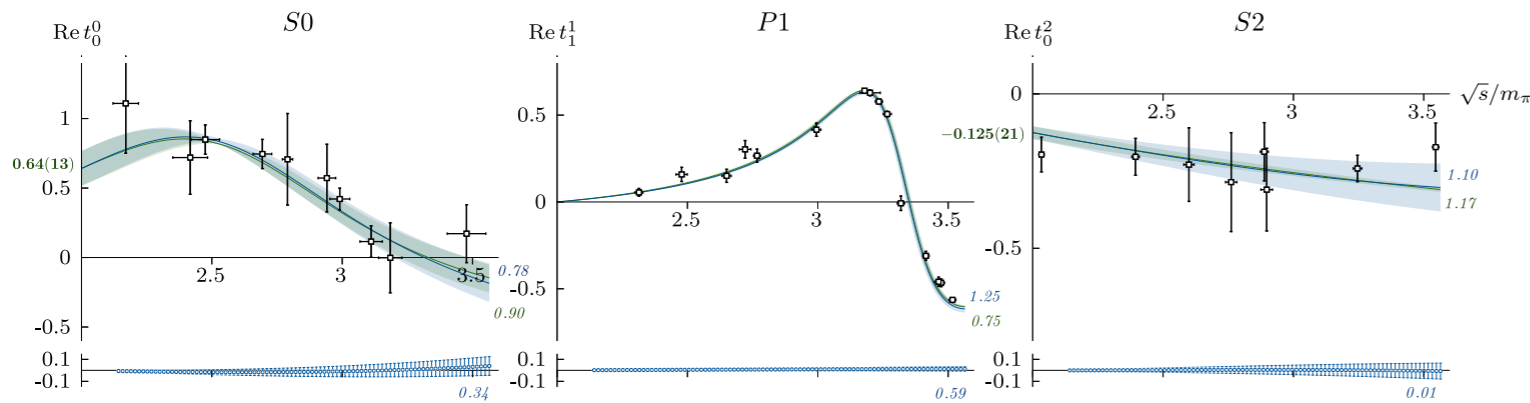


Quark mass dependence of the lightest resonance of QCD

S, P, D - wave $\pi\pi$ partial waves



JLab Highlight:

A combination of supercomputing and traditional techniques allowed Jefferson Lab theorists to better describe the unstable sigma meson particle, contributing to our comprehension of the strong interaction

Accomplishment: First full QCD characterization of the lightest resonance.

Methods: Graph evaluation techniques developed in partnership with SciDAC RAPIDS.

Impact: Provide guidance to analysis campaign of K-long experiment at JLab12

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Submitted as a DOE highlight

