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Confirmation of the $f_0(500)$ existence by pion scalar form factor and also the correct values of $f_0(500)$ mass and width from it

The pion scalar form factor phase representation derived from the first principles together with unprecise experimental information on the S-wave isoscalar $\pi\pi$ scattering phase shift in elastic region is sufficient for a confirmation of $f_0(500)$ meson existence in a model independent way. However, for determination of correct mass and width of $f_0(500)$ in the framework of such fully solvable mathematical scheme the data with theoretical errors to be generated by the Garcia-Martín-Kaminski-Pela'es-Yndurain Roy-like equations should be employed.

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