

The pion transition form factor in the SDE-BSE approach

Abstract

Recent results on the $\gamma^*\gamma \rightarrow \pi^0$ transition form factor are presented on the entire domain of spacelike momenta using the SDE-BSE approach to hadron physics. The result agree with data obtained by the CELLO, CLEO, and Belle Collaborations. The approach unifies this prediction with that of the pion parton distribution amplitude and elastic electromagnetic form factor and demonstrates, too, that a fully self-consistent treatment can readily connect a pion PDA with the perturbative QCD prediction for the transition form factor in the hard photon limit.

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