Single and double Dalitz decays of π^0, η and η' through rational approximants

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I will analyze the anomalous single and double Dalitz decays of the neutral pseudoscalar mesons, $\mathcal{P} \to \ell^+\ell^-\gamma$ and $\mathcal{P} \to \ell^+\ell^-\ell^+\ell^-$ ($\mathcal{P} = \pi', \eta, \eta'$; $\ell = e$ or μ), employing a model-independent transition form factor (TFF) of the $\mathcal{P}\gamma^*\gamma^{(*)}$ vertices built up, through the use of rational approximants, from the current experimental data of the space-like TFF $\gamma^*\gamma \to \mathcal{P}$. Predictions for the branching ratios and the spectra will be given and compared with present experimental status.

References

1. R. Escribano and S. González-Solís, in preparation.
2. S. González-Solís, P. Masjuan and P. Sanchez-Puerts in preparation.