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Electromagnetic transition form factor and decays of neutral pions

Saturday, 4 June 2016 16:00 (1:30)

Collaboration

Abstract content

In this talk we will discuss two important processes of the low-energy hadron physics: the rare decay $\pi^0 \to e^+e^-$ and the Dalitz decay of π^0 .

We briefly summarize experimental and theoretical results on the decay $\pi^0 \to e^+e^-$. The analytical two-loop QED corrections together with the bremsstrahlung contribution beyond the soft-photon approximation are reviewed.

Finally, we present the Two-hadron saturation (THS) scenario for the PVV correlator and apply it to the processes under discussion.

The obtained results can be also used in a theoretical calculation of the hadronic light-by-light scattering contribution to the g-2 type experiments.

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