

## Low-energy kaon-nucleon interaction studies by AMADEUS

*Friday 1 July 2022 09:45 (20 minutes)*

The strong interaction theory in the low energy regime, is still missing fundamental experimental results in order to achieve a breakthrough in its understanding. Among these, the investigation of the low-energy kaon-nucleon/nuclei processes plays a key-role. The talk will give an outline of the results obtained by the AMADEUS experiment performed at the DAFNE Collider of LNF-INFN.

The studies on the non-resonant hyperon pion formation amplitude below the K-N threshold and implications on the nature of the  $\Lambda(1405)$  will be reviewed. An updated report of the branching ratios and of the low-energy cross sections measurements (for kaon momenta up to 130 MeV/c) of the K- single and multi-nucleon absorptions on various light nuclear targets will be given.

I shall conclude with future plans on kaonic-nuclei interaction studies at DAFNE.

**Author:** Dr PISCICCHIA, Kristian (CREF, LNF (INFN))

**Presenter:** Dr PISCICCHIA, Kristian (CREF, LNF (INFN))

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