

# AntiKaons in Matter

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Several experiments have been devoted to the study of the antikaon properties within nuclear matter to understand the interaction between antikaons and nucleons at different density conditions. Experimental evidence delivered by kaonic atoms, kaon scattering data and the existence of the L(1405) resonance proves the antikaon-nucleon interaction to be attractive in the vacuum but the behavior within nuclear matter is far from being settled. One of the major issues in these investigations is the understanding of absorption processes of antikaon on nucleons. We present in this talk recent measurements of antikaon absorptions as measured by the AMADEUS collaboration exploiting slow antikaons beams and by the HADES collaboration with pion-induced reactions on light and heavy nuclei.

The AMADEUS results delivers precise measurements on single, doublet and triplet of nucleons while the HADES data do allow to measure the total absorption of antikaon on carbon and lead nuclei, also including the effect of the  $f$  resonance.

The results are discussed to attempt to reach a coherent explanation for the absorption phenomena of antikaons.

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