

The AMADEUS experiment: Search for kaonic clusters at DAΦNE

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The AMADEUS experiment [1] will perform the first complete experimental study of the case of the so-called deeply bound kaonic nuclear states. Such a study has deep consequences in a still open sector of the strangeness hadronic/nuclear physics: how the hadron masses and hadron interactions change in the nuclear medium with consequences on the structure of cold dense hadronic matter. AMADEUS will perform exclusive - full acceptance - measurements, all particles in the formation and decay processes of deeply bound nuclear clusters will be detected.

Preliminary results from the analysis of KLOE experiment data in the search for the kaonic clusters will be presented as well.

[1] AMADEUS Letter of Intent,

http://www.lnf.infn.it/esperimenti/siddharta/LOI_AMADEUS_March2006.pdf

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