Lunch Talk PV XII Thu 13:00 HS 1 Physik

Overview and plans of the Italian German Collaboration in hadron and nuclear physics — •Angela Bracco — Università degli Studi di Milano and INFN

The Italian German Collaboration in hadron and nuclear physics has a well established tradition concerning experiments, technical, and theoretical developments. This long lasting collaboration has been growing during the years. Selected results will be presented that are mainly related to activities at the German and Italian Laboratories and at CERN. INFN is the Italian funding agency supporting during the years these successful researches. Presently there are very fruitful collaborations at MAMI and ELSA addressing open questions for unconventional and exotic hadrons via precision spectroscopy. Via heavy ions experiments at FAIR/GSI and at CERN the search of dense quark matter and of hot and dense quark-gluon plasma has been carried out leading to very interesting results from which it is possible to extract quantity relevant for other physics sectors, in particular for the description of neutron stars. Nuclear structure experiments performed at FAIR/GSI and at INFN-LNL mainly via gamma spectroscopy are presently concentrating on new phenomena occurring far from stability and on nuclear properties of interest for the modeling of the nucleosyntheses. The measurements of reactions occurring in the stars at the laboratory LNGS have led to unique results. From the few selected highlights it is clear that there is bright future ahead and thus it will be important to further reinforce this successful Italian German collaboration.