

PREFACE

The International Conference Dark Matter, Hadron Physics and Fusion Physics took place on September 24-26, 2014 at the University of Messina, Messina, Italy. Fifty talks presented at the Conference covered a large range of subjects inherent in the corresponding fields, and the researchers working in various Laboratories of the world discussed new exciting experiments, theories and ideas involving searches at the energy and precision frontiers as well as possible effects of new physics.

The latests results on dark matter searches at accelerators have been discussed together with limits established by direct and indirect detection. The growing interest in the dark photon motivated several reanalysis of data on tapes and new proposals currently running for dedicated searches. The experimental searches and theoretical motivations for light dark matter have been reviewed and discussed.

Various new analyses of e^+e^- collider data related to R measurements, exotic charged states in charmonium and bottomonium sectors were reported coming from DAFNE (Frascati), VEPP-2000 (Novosibirsk), BEPC in Beijing, BaBar and Belle together with many results in meson and baryon spectroscopy from Belle, BESIII, CLAS, COMPASS and MAMI. Important and complementary information was also provided by the high-energy frontier experiments at LHC.

Searches related to the new studies of the D-T fusion plasma, D-D fusion induced by laser, and ion sources for accelerators obtained from plasma induced by laser, are innovative and very important; as well as advanced studies of the heavy-ion induced reactions leading to the fusion and quasifission processes whose reaction products are strongly sensitive to effects of the entrance channels.

Giorgio Giardina
Simon Eidelman
Graziano Venanzoni
Marco Battaglieri
Giuseppe Mandaglio

Editors
of the International Conference DHF2014