

Preface

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The XVI edition of the IFAE meeting (Incontri di Fisica delle Alte Energie), jointly organized by the Physics Department and the Trieste INFN division, took place in the lecture hall of the University of Trieste. More than 150 people attended the meeting, following presentations on “frontier” topics in particle physics. The opening session saw Luigi “Gigi” Rolandi from CERN and Paride Paradisi from the University of Padova present the status of the Standard Model and the quest for New Physics. The traditional sessions (namely “Energy Frontier”, “Intensity Frontier”, “Cosmology and Astroparticles” and “New Technologies”) started immediately afterwards and lasted three days, showing the ample and different approaches to open problems in fundamental physics. More than 60 talks and almost 70 posters were presented, a large percentage of which by PhD students, as this is ultimately the driving reason for the IFAE annual meeting: to give the young generations an important opportunity to be on stage.

We would like to thank the members of the Local Committee that have organized this event: M. Boezio, V. Bonvicini, P. Camerini, M. Cobal, F. Cossutti, M. Fabbrichesi, L. Lanceri, F. Longo, F. Nesti, A. Romanino, R. Rui, R. Valandro, G. Zampa; and especially the secretariat: N. D’Antoni, A. Filippi, E. Novacco and T. Tenze for the fantastic social evening and the marvelous coffee breaks. A loud “thank you” to the Conveners of their sessions for chasing the speakers for months in order to be able to produce these proceedings: F. Bellini, E. Meoni, M. Pelliccioni, A. Urbano (Energy Frontier), F. Bucci, D. Buttazzo, M. Dorigo (Intensity Frontier), L. Canonica, C. Evoli, N. Mori, B. Patricelli (Cosmology and Astroparticles), G. F. Dalla Betta, B. Martelli, K. Schaeffner, P. Verwilligen (New Technologies). We want to express our gratitude to the members of the Scientific Committee who have given us the wise and thorough advices to make that perfect blend.

The workshop success, however, depends on the speakers, to whom we express our gratitude for their enthusiasm and devotion, and on the participants, who are responsible for creating the right atmosphere, and for asking the right questions! Finally, we must be grateful to INFN for its support, to the University of Trieste for the hospitality and to CAEN for their sponsorship.

We trust that you will enjoy the reading of the contributions collected in these proceedings!