

Preface

G. M. URCIUOLI

INFN, Sezione di Roma - Italy

ricevuto il 27 Agosto 2012

pubblicato online il 4 Settembre 2012

Parity Violation is clearly one of the most exciting topics in modern physics. A large experimental program, addressing a variety of physics topics is being conducted or is planned to be performed in the near future at many different facilities. The results of these studies will contribute to our knowledge of the fundamental properties of nature and will have a striking impact on many areas of physics. The techniques needed to achieve the experimental goals are often at the frontier of the present technology. It was consequential to organize workshops where Parity Violation scholars could meet to present and discuss the most recent achievements and the future projects in the Parity Violation field. The workshop PAVI11, held at the Department of Physics of the Sapienza University of Rome (Italy) in September 5-9, 2011, has been the 5th and most recent workshop of the series “From Parity Violation to Hadronic Structure and more...”. The first workshop was at the Institut für Kernphysik in Mainz (Germany, 2002), the second at the Laboratory for Subatomic Physics and Cosmology in Grenoble (France, 2004), the third at the Milos Conference Center in Milos (Greece, 2006) and the fourth at the College of the Atlantic, Bar Harbor (USA, 2009). PAVI11 covered many of the most important topics connected with Parity Violation, including: Parity Violation and QCD in Nuclei, Atomic Parity Violation, Hadronic Parity Violation, Tests and Extensions of the Standard Model, Electric Dipole Moment, Parity Violation in Electron Scattering. Developments of facilities suited to carry on Parity Violation programs were also discussed as well as the experimental techniques (*e.g.*, polarimetry and polarized sources) needed to run the experiments and achieve their goals. PAVI11 was a very exciting workshop, held in a warm and friendly atmosphere and this is reflected in the pages of these Proceedings, published in this volume of *Il Nuovo Cimento C*.