



Preface

The International Nuclear Physics Conference 2013 (INPC2013) was held on 2-7 June 2013 in Firenze, Italy, and it was organized by the Istituto Nazionale di Fisica Nucleare (INFN) and the universities of Firenze, Milano, and Padova. The INPC is the main conference in the field of nuclear physics, endorsed and supported by IUPAP (International Union of Pure and Applied Physics). It is held every three years and the present edition was the 25th of the series.

The Conference was attended by more than 700 participants (including more than 150 graduate students), from 43 countries. INPC2013 addressed the most compelling questions of modern nuclear physics, including nuclear structure and reactions, hot and dense nuclear matter, astrophysics, hadron structure and hadrons in nuclei, fundamental symmetries and interactions, neutrinos and nuclei, nuclear physics based applications as well as new facilities and instrumentation.

All topics were discussed in the morning plenary sessions and in the afternoon parallel sessions, which included about 300 invited and contributed talks. In addition, more than 300 posters were presented, mainly by graduate students and post-doctoral fellows, in a lively poster session.

Special plenary presentations were given by the winners of the IUPAP young scientist prize, which is awarded, for the field of nuclear physics, every three years during the INPC conference. This year's winners were: Rabia Burcu Cakirli (University of Istanbul), Stefano Gandolfi (Los Alamos National Laboratory) and Bjoern Schenke (Brookhaven National Laboratory). The INPC2013 conference also hosted the award ceremony of the IBA-Europhysics prize for applied nuclear science and nuclear methods in medicine to Prof. Marco Durante (GSI).

At the end of the conference, the Nuclear Physics Commission (C12) of IUPAP announced that the next INPC conference will be held in Adelaide, Australia, in 2016.

This issue of *EPJ Web of Conferences* contains most part of the plenary, invited, oral and poster contributions given at INPC2013. All published articles were peer-reviewed by expert referees according to the scientific standards expected for *EPJ Web of Conferences* journal.

**S.Lunardi, P.G. Bizzeti, C. Bucci, M. Chiari, A. Dainese, P. Di Nezza,
R. Menegazzo, A. Nannini, C. Signorini, J.J. Valiente-Dobon**

Editors of the INPC2013 Proceedings



ORGANIZING COMMITTEE

Cosimo Signorini, Chair, *Padova*
Pier Andrea Mandò, Co-chair, *Firenze*
Carlo Bucci, *LNGS*
Massimo Chiari, *Firenze*
Gianluca Colò, *Milano*
Andrea Dainese, *Padova*
Giacomo de Angelis, *LNL*
Pasquale Di Nezza, *LNF*
Silvia Leoni, *Milano*
Santo Lunardi, *Padova*
Roberto Menegazzo, *Padova*
Adriana Nannini, *Firenze*
Silvia Piantelli, *Firenze*
Domenico Santonocito, *LNS*
Josè Javier Valiente Dobon, *LNL*

PROGRAM COMMITTEE

Angela Bracco, Chair, *Milano*
Alessandro Olmi, Secretary, *Firenze*
Francesco Becattini, *Firenze*
Carla Cattadori, *LNGS*
Maria Colonna, *LNS*
Nicola Colonna, *Bari*
Oliviero Cremonesi, *Milano Bicocca*
Giacomo Cuttone, *LNS*
Fabiana Gramegna, *LNL*
Giovanni La Rana, *Napoli*
Franco Lucarelli, *Firenze*
Rosario Nania, *Bologna*
Eugenio Nappi, *Bari*
Giuseppina Orlandini, *Trento*
Sara Pirrone, *Catania*
Marco Radici, *Pavia*
Patrizia Rossi, *LNF*
Claudio Spitaleri, *Catania*
Mauro Taiuti, *Genova*
Ermanno Vercellin, *Torino*
Andrea Vitturi, *Padova*

INTERNATIONAL ADVISORY BOARD

Nicolas Alamanos, *France*
 Faical Azaiez, *France*
 Thomas Aumann, *Germany*
 Yorick Blumenfeld, *Switzerland*
 Maria Borge, *Spain*
 Stanley J. Brodsky, *USA*
 Mark Chadwick, *USA*
 Philippe Chomaz, *France*
 Luisa Cifarelli, *Italy*
 Francis A. Cucinotta, *USA*
 Jens Dilling, *Canada*
 Marco Durante, *Germany*
 Anatoly V. Efremov, *Russia*
 Rolf Ent, *USA*
 Martin Freer, *United Kingdom*
 Zsolt Fulop, *Hungary*
 Avraham Gal, *Israel*
 Sidney Gales, *France*
 Michel Garcon, *France*
 Donald F. Geesaman, *USA*
 C. Konrad Gelbke, *USA*
 Muhsin Harakeh, *The Netherlands*
 Sotirios Harissopulos, *Greece*
 Wick Haxton, *USA*
 Morten Hjort-Jensen, *Norway*
 Francesco Iachello, *USA*
 David Ireland, *United Kingdom*
 Barbara Jacak, *USA*
 Robert Janssens, *USA*
 Rauno Julin, *Finland*
 Ralf Kaiser, *United Kingdom*
 Taka Kajino, *Japan*
 Reiner Kruecken, *Canada*
 Karlheinz Langanke, *Germany*
 Alinka Lepine-Szily, *Brasil*
 Sylvie Leray, *France*
 Bao-An Li, *USA*
 Adam Maj, *Poland*
 Jie Meng, *China*
 Dong-Pil Min, *Korea*
 Hugh E. Montgomery, *USA*
 Shoji Nagamiya, *Japan*
 Witold Nazarewicz, *USA*
 Thomas Nilsson, *Sweden*
 Yuri Oganessian, *Russia*
 Takaharu Otsuka, *Japan*
 Alfredo Poves, *Spain*
 Achim Richter, *Germany*
 Karsten Riisager, *Denmark*
 Marie-France Rivet, *France*
 Guenther Rosner, *Germany*
 Hideyuki Sakai, *Japan*
 Hiroyoshi Sakurai, *Japan*
 Helmut Satz, *Germany*
 Reinhard W. Schulte, *USA*
 Yves Schutz, *France*
 Jurgen Schukraft, *Switzerland*
 John Simpson, *United Kingdom*
 Bikash Sinha, *India*
 Johanna Stachel, *Germany*
 Horst Stoecker, *Germany*
 Hans Stroehler, *Germany*
 Anthony W. Thomas, *Australia*
 Michael Thoennessen, *USA*
 Werner Tornow, *USA*
 Vladimir Tretyak, *Ukraine*
 Robert Tribble, *USA*
 Piet Van Duppen, *Belgium*
 Dario Vretenar, *Croatia*
 Thomas Walcher, *Germany*
 Xin-Nian Wang, *USA*
 Eberhard Widmann, *Austria*
 Michael Wiescher, *USA*
 Bolek Wyslouch, *USA*
 Nicolae-Victor Zamfir, *Romania*
 Wenlong Zhan, *China*

