

PROCEEDING OF MPGD2015

The “4th International Conference on MicroPattern Gaseous Detectors – MPGD2015” (web site: <http://mpgd2015.ts.infn.it/>) has taken place in Trieste from 12 to 17 October 2015, organized by INFN – Sezione di Trieste. Previous conferences in this series have been held in 2009 in Kolymbari Greece, in 2011 in Kobe, Japan and in 2013 in Zaragoza, Spain. For the third time the venue is in Europe, where the first seminal Conference took place in 2009, thanks to the enthusiasm of the MPGD-dedicated community and the support of the technological collaboration RD51, CERN-based and dedicated to MPGD developments and dissemination.

These series of meetings, where experts from around the world review both the state of the art and novel perspectives in the sector, have become a reference point in the field of MPGDs. Following this tradition, the Trieste Workshop attracted more than 130 participants with its scientific programme including six invited talks, forty contributed talks and forty posters. The topical sessions were dedicated to “New Developments in MPDGs”, “Production techniques”, “Material and Ageing Tests”, “MPGD Detector Physics”, “Simulation and Software”, “Electronics” and “Applications”. The Workshop also recognized young researchers in the field with the George Charpak Young Scientist Award, where the MPGD 2015 Award winners are: Fabian KUGER for the poster “Electron losses during drift and mesh transit in an ATLAS-like MicroMegas”, Maxence VANDERNBROUCKE for the oral presentation: “Resistive Strip Micromegas Tracker for CLAS12 Experiment” and Eran ERDAL for the oral presentation: “Bubble-assisted Liquid Hole-Multipliers: bubble stability and electroluminescence in varying electrode configurations”.

The Workshop confirmed the great vitality of the MPGDs: in the current era of high-resolution and high-precision experiments, the domain of applications is becoming larger and larger, and more challenging requirements for the design of new detectors are arising. Nowadays, these detectors play a central role in particle, nuclear and astroparticle physics, where they form key systems in current and future experiments in a variety of research fields, while the panorama of the applications beyond fundamental research is continuously growing.

We would like to thank all the members of the International Organizing Committee, the Local Organizing Committee and the session conveners: their contribution has been fundamental to guarantee the high scientific standard of the Conference.

The participants had benefited of the superb Conference site, in the centre of Trieste, directly on a pier protruded in the Adriatic sea, and some relaxation has been provided by the social programme, offering opportunities to meet Trieste and its surroundings: a welcome lunch, a seminar dedicated to the special relation between Trieste and coffee, a concert performance offered to the Conference participants, the Conference excursion with the visit of the historical town of Cividale followed by the Conference banquet.

We are grateful to all our colleagues at INFN Trieste for their help, contribution and support. Special thanks to Erica Novacco for taking care of the Workshop secretariat,

a job she performed with great competence and generosity. MPGD2015 was sponsored by several Italian and other European Institutions, by the Rd51 Collaboration and private companies to which we express our gratitude.

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