

PREFACE

Six years after the First Workshop on Robotic Autonomous Observatories, the number of automatic astronomical facilities worldwide continues to grow, and the level of robotisation, autonomy, and networking is increasing as well, with further strong impact in many astrophysical fields, like the search for extra-solar planets, the monitoring of variable stars in our Galaxy, the study of active galactic nuclei, the detection and monitoring of supernovae, and the immediate follow-up of high-energy transients such as gamma-ray bursts.

The manuscripts published in these Conference Series of the *Revista Mexicana de Astronomía y Astrofísica* are the fruit of the IV Workshop on Robotic Autonomous Observatories held in Torremolinos, Málaga (Spain) on September 28 – October 2, 2015. The main focus of the workshop was to deal with the new and existing astronomical facilities whose goal is to observe a wide variety of astrophysical targets with no (or very little) human interaction. The workshop became an international forum for researchers to summarise the most recent developments and ideas in the field, with a special emphasis given to the technical and observational results obtained within the last two years.

As in 2009, 2011, and 2013, Torremolinos (10 km away from Málaga) was the perfect place for hosting the workshop with pleasant early October temperatures and the possibility for swimming in the Mediterranean sea at any time, as the Conference room at Hotel Camino Real was only 200 m away. At only twelve kilometres away, the 3,000 yr old Málaga Town offered new views of its centre, thanks to new archaeological excavations, with its magnificent view from the Alcazaba fortress during the Guided Tour to Málaga, prior to the Conference dinner in Parador Nacional de Gibralfaro over the Málaga bay. The excursion day to Antequera megalithic Dolmens (just nominated as a UNESCO World Heritage Centre in 2016) and the Torcal karstic landscape was also a unique experience for many of the attendants. They also enjoyed San Miguel's Torremolinos Fair on September 29.

The Workshop was organized by both the Instituto de Astrofísica de Andalucía of the Spanish Research Council (IAA-CSIC) and the Department of System Engineering and Automatics at Universidad de Málaga (UMA) with support from the European Space Agency (ESA) as a special session was focused on space debris. We want to thank the members of the Scientific Organizing Committee (SOC): J. Bai, A. J. Castro-Tirado (chair), V. Connaughton, S. Guziy, L. Hanlon, R. Hudec, A. Klotz, V. Lipunov, L. Mankiewicz, V. Muñoz, S. B. Pandey, and F. Özeren for arranging an excellent scientific programme, and express our gratitude to the members of the Local Organizing Committee (LOC): J. Cabello, S. Castillo, R. Cunniffe, A. García-Cerezo (chair), Y. Hu, S. Jeong, C. López-Casado, V. Muñoz-Fernández, O. Lara-Gil, S. R. Oates, C. Pérez del Pulgar, J. C. Tello, and B.-B. Zhang. Together with the Torremolinos and Malaga Town Halls and the Patronato de Turismo de la Costa del Sol, they made of the staying of the 80 participants in Málaga an unforgettable experience.

We appreciate all the anonymous referees and *Revista Mexicana de Astronomía y Astrofísica* for the very careful edition of this Issue.

We also thank Irina Guziy for designing the nice Workshop announcement poster, and María Eva Alcoholado-Feltström for her assistance as Workshop secretary in order to achieve a perfect organization.

Finally we want to devote this publication to the memory of Javier Gorosabel Urkia and Mariló Pérez-Ramírez, colleagues and friends who left us suddenly in early 2015.

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