

PREFACE

The Instituto Argentino de Radioastronomía (IAR) was founded in 1962 as the first radio astronomy facility in Latin America. Nowadays -as 2022- it operates two 30-m radio telescopes used mainly for timing and continuum observations at 1.4 GHz. There is a growing interest in the low-frequency radio window to the Universe, with the planning and implementation of pathfinders and new observatories around the world. IAR is contributing to these efforts with the Multipurpose Interferometer Array (MIA), a versatile low-frequency interferometer that will observe up to a couple of GHz, designed to investigate transient sources and non-thermal cosmic radiation from the Southern Hemisphere. MIA has been conceived as the future main facility to be operated by IAR.

On the occasion of the institute's 60th anniversary, we gathered on November 15 to 18, 2022 in Buenos Aires city worldwide experts on low-frequency radio astronomy, both in science and technology, in a workshop entitled "IAR's 60th anniversary: Prospects for low-frequency radio astronomy in South America".

The meeting allowed to exchange and discuss ideas, experiences and research perspectives in this exciting field of astronomy. It boosted MIA development and low-frequency radio science in the region. In parallel, propitiated the formation of new links and collaborations to certainly shape the future of radio astronomy in Argentina and South America.

The workshop focused on a wide range of topics at the basic research level. Those topics included areas of research in astronomy such as fast radio bursts, pulsar timing, active galactic nuclei, galactic non-thermal sources, the early universe. There were presentations on the latest research in these fields, as well as the necessary instrument design and algorithms work to perform high-speed data transfer and process the data.

The Scientific Organising Committee was composed by Ileana Andruchow, Paula Benaglia (Chair), Guillermo Gancio and Gustavo E. Romero. The Local Organising Committee was comprised by Ileana Andruchow, Facundo Aquino, Paula Benaglia, Marcos Borgetto, Camila Galante, Leandro M. García (Chair) and Juliana Saponara.

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The meeting consisted of invited and contributing talks, posters, and plenty of time for discussions. This Volume compiles the proceedings of the presentations.

Paula Benaglia and Ileana Andruchow
Editors of the proceedings