Institute for Research in Fundamental Sciences

IPM's School of Astronomy took part at the first SKA Data Challenge (SDC1)

The Square Kilometer Array (SKA) will soon be the largest radio telescope in the world.
About thousands of dishes and up to a million low frequency antennas of the SKA will enable astronomers to monitor the sky in unprecedented detail and speed.
Thanks to its configuration, the SKA will largely exceed the image resolution of the Hubble Space Telescope, while mapping huge areas of the sky with unprecedented sensitivity.
The SKA will be at the forefront of transformational science by looking at the cosmic down,
The very first stars and galaxies, the nature of dark matter and dark energy, the cosmic magnetism, and more.
The Square Kilometre Array Organisation (SKAO) released its first ever Science Data Challenge in November 2018, giving astronomers a taste of the highly detailed images the SKA will produce.
The challenge required the analysis of a series of high resolution images created through data simulations.
Researchers were invited to use their own software to find, identify and classify the sources.
The IPM's School of Astronomy was one of the 9 international teams participated in the SDC1 challenge as reported by the SKAO (https://www.skatelescope.org/news/international-teams-complete-skas-first-science-data-challenge/) and the results will be published in a separate scientific article.
This was the first in what will become a series of challenges aimed at training the SKA community in what to expect from SKA data.