Andrés Balaguera Antolínez

Cosmology and Astroparticles

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Andrés Balaguera-Antolínez is a colombian physicist (bachellor in Physics at Universidad Nacional de Colombia, MSc in Physics at Universidad de los Andes). He obtained his Ph.D in Astronomy in 2011 at the University Ludwig Maximillian of Munich, through the IMPRS fellowship developed at the Max Planck Institute for Extraterrestrial Physics. He has 10 years of postdoctoral experience in the field of cosmology and the large-scale structure of the Universe, working ast Argelander Insitute for Astronomy (Bonn) and Roma3 University (Rome). He has co-authored a number of publications in the field of theoretical and observational cosmology and has led the cosmological analysis of a variety of extra-galactic samples (e.g. X-ray samples, spectroscopic, photometric and radio-samples). He has collaborated within the Euclid mission providing a number of prototype codes to measure the galaxy clustering signal for cosmological analysis, and actively participates in collaborations such as DESI and JPAS, in subjects such as mock catalogs, clustering analysis and target selection for large-scale structure. He is the leader of the CosmicAtlas project and main developer of the BAM algorithm, envisaged to explore theoretical aspects of the large scale structure of the Universe and generate galaxy mock catalogs for the largest galaxy surveys.