

# Special Issue

## keV Warm Dark Matter ( $\tilde{\chi}$ WDM) in Agreement with Observations in Tribute to Héctor J. de Vega (2nd Edition)

### Message from the Guest Editor

In light of the success of the first volume of this Special Issue, titled “keV Warm Dark Matter ( $\tilde{\chi}$ WDM) in Agreement with Observations in Tribute to Héctor J. de Vega”, we are publishing this second volume under the same title. The first volume attracted great interest, as evidenced by its impressive 11 publications and pioneering content of high impact and actuality. This topic is robust, attracting various authors and readers; thus, further developments and results are welcome to be submitted to this second Special Issue. This collection of papers will thus register the exciting ongoing theoretical and experimental developments in (i) the search for the leading keV WDM particle candidates and (ii) the impact of keV WDM astrophysics (including its signatures and constraints with high-redshift galaxies and clusters, cosmic recombination, 21 cm line, and implications for star formation, as well as black holes too) with or for the JWST, HST, SKA, X-ray astronomy, gravitational lensing, particle and nuclear physics, keV neutrinos, and other astronomical observations, as well as news from KATRIN, ECHo, Ptolome, and other experiments.

### Guest Editor

Prof. Dr. Norma G. Sanchez

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### Deadline for manuscript submissions

closed (15 July 2025)



# Universe

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## About the Journal

### Message from the Editor-in-Chief

The multidisciplinary journal *Universe* is aiming to follow and, hopefully, to lead to the largest extent as possible the ever-self renovating threads which weave mathematical theories with our understanding of the magnificent natural world. On behalf of all the distinguished members of the Advisory and Editorial Boards, I extend my welcome to this journal and look forward to hearing from the interested contributors and learning about their valuable research.

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### Editor-in-Chief

Prof. Dr. Lorenzo Iorio  
Ministero dell' Istruzione e del Merito, Viale Unità di Italia 68, 70125 Bari,  
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