MENG-XIANG LIN

Department of A&A, University of Chicago
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EDUCATION

The University of Chicago *September 2015 - Present*
Ph.D. in Astronomy and Astrophysics
Advisor: Prof. Wayne Hu

Peking University *September 2011 - July 2015*
B.S. in Astronomy and Astrophysics

AWARDS AND HONORS

Brinson Fellowship (U. Chicago) 2016 & 2017

The Guanghua Scholarship (Peking U.) 2014

The Excellence Award of Study (Peking U.) 2013 & 2014.

PUBLICATION

(Total citations: **392** by 2022.01.15)
Major contributions:

Evan McDonough, **Meng-Xiang Lin**, J. Colin Hill, Wayne Hu, Shengjia Zhou, "The Early Dark Sector, the Hubble Tension, and the Swampland", Submitted, arXiv: 2112.09128 (2021).

Jose Maria Ezquiaga, Wayne Hu, Macarena Lagos, **Meng-Xiang Lin**, "Gravitational wave propagation beyond general relativity: waveform distortions and echoes", JCAP 11, 048 (2021).

Meng-Xiang Lin, Wayne Hu, Marco Raveri, "Testing H_0 in acoustic dark energy models with Planck and ACT polarization data", Phys. Rev. D 102, 123523 (2020).

Meng-Xiang Lin, Giampaolo Benevento, Wayne Hu, Marco Raveri, "Acoustic Dark Energy: Potential Conversion of the Hubble Tension", Phys. Rev. D 100, 063542 (2019).

Meng-Xiang Lin, Marco Raveri, Wayne Hu, "Phenomenology of modified gravity at recombination", Phys. Rev. D 99, 043514 (2019).

Meng-Xiang Lin, Ren-Xin Xu, Bing Zhang, "Oscillation Driven Magnetospheric Activity In Pulsars", *Astrophys. J.* 799, 152 (2015).

Minor contributions:

Macarena Lagos, **Meng-Xiang Lin**, Wayne Hu, "Curvature perturbations in the effective field theory of inflation", Phys. Rev. D 100, 123507 (2019).

Miguel Escudero, Asher Berlin, Dan Hooper, **Meng-Xiang Lin**, "Toward (finally!) ruling out Z and Higgs mediated dark matter models", *JCAP* 12, 029 (2016).

S. Dai, M. C. Smith, **M. X. Lin**, Y. L. Yue, G. Hobbs, R. X. Xu, "Gravitational Microlensing by Neutron Stars and Radio Pulsars: Event Rates, Timescale Distributions, and Mass Measurements", *Astrophys. J.* 802, 120 (2015).

RESEARCH TALKS

Invited Talk Princeton University, Princeton, December, 2021; "*Seeking solutions for the Hubble tension*"

Invited Talk University of Pennsylvania, Pennsylvania, October, 2021; "*Seeking solutions for the Hubble tension*"

Invited Talk Columbia University, New York, October, 2021; "*Seeking solutions for the Hubble tension*"

Invited Talk SUSY2021 , Beijing, August, 2021; "*Gravitational wave propagation beyond GR: waveform distortions and echoes*"

Selected Talk COSMO19, RWTH Aachen University, Aachen Germany, September, 2019; "*Acoustic Dark Energy: Potential Conversion of the Hubble Tension*"

Postdoc Symposium University of Chicago, Illinois, March, 2019; "*Separate Universe and Consistency Relation beyond slow-roll inflation*"

Contributed Talk H_0 workshop, University of Chicago, Illinois, October, 2018; "*Modified Gravity On Reducing the H_0 tension*"

Poster TRISEP Summer School, Perimeter Institute, Waterloo, Canada, July, 2018; "*Phenomenology of Modified Gravity at Recombination*"

TEACHING EXPERIENCE

Teaching Assistant, The Physics of Stars	2020
Teaching Assistant, Stars	2018
Teaching Assistant, The Milky Way	2017
Teaching Assistant, The Physical Universe	2017
Teaching Assistant, Current Topics in Astrophysics	2016
Teaching Assistant, Physics of Stars and Stellar System	2015

PROFESSIONAL SKILLS

Computer Languages	python, C/C++, MATLAB, fortran
Software & Tools	Mathematica