

Name: Yi Wang

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Education:

PhD: 2009, Institute of Theoretical Physics, Chinese Academy of Sciences

BSc: 2005, University of Science and Technology of China

Employment:

2020.07 – present, Associate Professor, Hong Kong University of Science and Technology

2015.01 – 2020.06, Assistant Professor, Hong Kong University of Science and Technology

2013 – 2015, Stephen Hawking Fellow, University of Cambridge

2012 – 2013, project researcher, University of Tokyo

2009 – 2012, postdoctoral fellow, McGill University

Research Interests: Cosmology, gravity and theoretical high energy physics, especially model independent tests of inflation, the theory of the inflationary perturbations, the initial condition of the quantum universe, the particle spectrum of the very early universe, and the physics of black holes and gravitational waves.

Awards and Distinctions:

- Third Prize, the International Contest of Creative Popular Science Video Works (2021)
- HKUST School of Science Teaching Award (2021)
- NSFC Excellent Young Scientist (EYS) Scheme (Hong Kong and Macau) (2020)
- “The Teachers I Like” selected by HKUST students (2016, 2018)
- Early Career Award by Research Grant Council of Hong Kong (2016)
- Stephen Hawking Advanced Fellowship (2013)
- Institute of Particle Physics Fellowship (2009)
- Merit scholarship program for foreign students, Canada (2009)
- President Scholarship, Chinese Academy of Sciences (2009)
- First Rank Scholarship, Institute of Theoretical Physics, Chinese Academy of Sciences (2009)
- Second Prize, Young Scholars Competition of the New Vision 400 Conference (2008)
- Excellent Student Award, Chinese Academy of Sciences (2007)
- Excellent Graduate of the Province (2005)

Service:

- Guest editor and contributor of the popular science book series “100,000 Whys” 6th edition, Juvenile & Children’s Publishing House (2013)
- Physics Olympiad:
 - Academic Committee member, 17th Asian Physics Olympiad (2016)
 - Team leader, the Hong Kong Team participating the 2017 International Physics Olympiad
- Referee of debate competition:
 - Radio Television Hong Kong Cup (2018)
 - World Mandarin Debating Championship (2018)
- Guest editor of special issue “Inflation”, International Journal of Modern Physics D, Volume 26, Issue 1 (2017)

- Journal referee:

Physics Review Letters, Physics Review D, Journal of Cosmology and Astroparticle Physics, Journal of High Energy Physics, Classical and Quantum Gravity, Foundations of Physics, Chinese Physics C, European Physical Journal C, Physics of the Dark Universe, International Journal of Modern Physics D , Physics Letter B and Nuclear Physics B

Teaching:

- PHYS2022: Modern Physics, HKUST (2015 - 2020)
- PHYS2023: Modern Physics Laboratory, HKUST (2015 - 2018)
- Introduction to Computational and Modeling Tools (2019, 2020)
- Algorithm and Object-Oriented Programming for Modelling (2019, 2020)
- PHYS4071: Big Bang Cosmology and Inflation, HKUST (2018)
- Instructor of Spring School “Early Universe: Theory and Observations” (2017)
- PHYS6810E: General Relativity and Advanced Cosmology, HKUST (2017, 2019)
- PHYS6810D: Introduction to Quantum Field Theory, HKUST (2016)
- PHYS6810C: Advanced Cosmology, HKUST (2015)
- PHYS6810K: Quantum Field Theory II, HKUST (Co-instructor, 2019)
- Gave lecture series on Mathematica Programming, University of Cambridge (2014)
- Instructor of the 7th Asian Winter School on Strings, Particles and Cosmology (2013)
- Physics 743: The Very Early Universe (Co-instructor), McGill University (2012)

Summary of Publication and Impacts:

101 papers published on refereed journals. Statistics of publications:

[Google Scholar](#): 4845 citations, h-index: 34, i10 index: 79

[INSPIRE HEP](#): 4768 citations, h-index: 34, i10 index: 77

In 2016-17, our research on Primordial Standard Clocks was selected as the [cover story of HKUST](#) (short URL: goo.gl/lhl9ek), and reported in Research@HKUST. The research was also reported by [Center for Astrophysics, Harvard](#) (goo.gl/AhfImc), and over 100 media/websites, for example [Daily Mail](#) (goo.gl/7FZIWp), [Wen Wei Po](#) (goo.gl/b8pSOe) and [Ta Kung Pao](#) (goo.gl/6ncLSa). According to the Altmetric Attention score, this research was ranked #7 (and #1 of publications with similar age) of all 4,557 papers published by Journal of Cosmology and Astroparticle Physics.

In 2017, our research on the Standard Model Background of the Cosmological Collider was reported by [Center for Astrophysics, Harvard](#) (goo.gl/BUuuAT) and many other media/websites. In 2009 our research on the CMB cold spot and dark energy was reported by [New Scientist](#) (goo.gl/fDTHn5) and [Science Watch](#) (goo.gl/Ijmb1P), respectively.

Last updated: March 2022