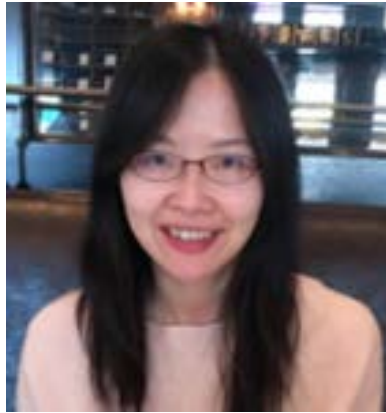


## 國立清華大學第 26 屆新進人員研究獎得獎人簡介



### 天文研究所 楊湘怡助理教授

楊湘怡博士自 2020 年起擔任國立清華大學天文研究所助理教授。她於 2003 年和 2004 年分別取得國立台灣大學的學士和碩士學位，並於 2011 年在美國伊利諾伊大學香檳分校獲得博士學位。此後，她在 2011 年至 2014 年期間擔任密西根大學的博士後研究員，並於 2015 年至 2017 年間擔任 NASA 愛因斯坦研究員，以及在 2018 年至 2020 年期間在美國馬里蘭大學擔任助理研究員。楊教授是一位計算天文物理學家，她的研究專注於使用高效能計算平台上的尖端數值模擬來研究黑洞物理和星系的形成與演化。她的專業領域包括開發新型算法來研究複雜的物理機制，包括磁場、宇宙射線和等電漿物理。她在星系團中黑洞反饋、銀河系中費米和義羅西塔泡泡的物理起源以及宇宙射線驅動的星系風方面都有重大貢獻。由於她優異的研究成果，她獲得了 2022 年國家理論科學中心青年理論學者獎、2022 年台灣物理學會優秀年輕物理學家獎和 2023 年國科會吳大猷紀念獎。

Dr. Hsiang-Yi Karen Yang is an assistant professor at the Institute of Astronomy of National Tsing Hua University (NTHU) since 2020. She obtained the B.S. and M.S degrees from National Taiwan University in 2003 and 2004, respectively, and received her Ph.D. degree from University of Illinois at Urbana-Champaign in the United States in 2011. Afterwards, she was a postdoctoral fellow at University of Michigan in 2011-2014, and NASA Einstein Fellow in 2015-2017 and an assistant research scientist in 2018-2020 at University of Maryland in the United States. Prof. Yang is a computational astrophysicist, whose research is focused on black hole astrophysics and the formation and evolution of galaxies using cutting-edge numerical simulations on high performance computing platforms. Her expertise is to develop novel algorithms to investigate complex physical processes, including magnetic fields, cosmic rays, and plasma physics. She has made significant contributions to the understanding of black hole feedback in galaxy clusters, the physical origin of Fermi and eROSITA bubbles in the Milky Way Galaxy, and cosmic-ray driven galactic outflows. Because of her achievements, she has been awarded the NCTS Young Theoretical Scholar Award (2022), TPG Outstanding Young Physicist Award (2022), and NSTC Ta-You Wu Memorial Award (2023).