

# Peter Tsun Ho Pang

## Research interest

Multi-messenger astronomy      Interdisciplinary study on nuclear physics  
 Gravitational-wave astrophysics      Test of general relativity

## Professional experience

2023 - Pres.    **Postdoctoral researcher**      Utrecht University  
 Supervisor: Prof. Dr. Chris VAN DEN BROECK  
 2022 - 2023    **Data scientist**      ABN AMRO Bank N.V.  
 Manager: Dr. Timo MAARLEVELD

## Education

2018 - 2022    **Ph.D. in Physics**      Utrecht University  
 Supervisor: Prof. Dr. Chris VAN DEN BROECK  
 2016 - 2018    **M.Phil. in Physics**      The Chinese University of Hong Kong  
 Supervisor: Prof. Dr. Tjonnie G. F. LI  
 2012 - 2016    **B.Sc. in Physics – First class honours**      The Chinese University of Hong Kong

## Prizes

2023    Committee of Astroparticle Physics in the Netherlands (CAN) Thesis Prize  
 2018    The Chinese University of Hong Kong Physics Teaching Assistant Award

## Publication summary

Information taken from [inspirehep.net](https://inspirehep.net) on 4<sup>th</sup> of March, 2024

	Excluding all LVK papers	Including LVK papers with contribution	All citeable papers
Number of papers:	<b>33</b>	<b>36</b>	<b>146</b>
Number of citations:	<b>1,394</b>	<b>3,335</b>	<b>52,278</b>
Average citations per paper :	<b>42.2</b>	<b>92.6</b>	<b>358.1</b>
h-index:	<b>17</b>	<b>20</b>	<b>70</b>

## Five most representative publications

- P. T. H. Pang et al. (2023). *Nature Communications* 14.1, p. 8352**  
 – Advanced multi-messenger analysis software for binary neutron star mergers and astronomical transients  
 – Integrated into Zwicky Transient Facility’s online search pipeline ZTFReST
- S. Huth, P. T. H. Pang, et al. (2022). *Nature* 606, pp. 276–280**  
 – Joint-first authorship; State-of-the-art constraint on nuclear equation of state by combing multi-messenger astronomical observations & terrestrial heavy ion collision data
- T. Dietrich et al. (2020). *Science* 370.6523, pp. 1450–1453**  
 – Lead analyst; State-of-the-art constraint on nuclear equation of state with multi-messenger astronomical observations and robust estimation of the Hubble constant
- N. Kunert et al. (2024). *Mon. Not. Roy. Astron. Soc.* 527.2, pp. 3900–3911**  
 – Established evidence of kilonova component in GRB211211A with Bayesian statistics
- R. Abbott et al. (2021). *Phys. Rev. D* 103.12, p. 122002**  
 – Person-in-charge of sections VA and VII; LVK collaboration paper on testing general relativity

## Major collaborations

2023 - Pres.    Einstein Telescope Collaboration  
 2018 - Pres.    Virgo Collaboration  
 2016 - 2018    LIGO Scientific Collaboration

## Referee for scientific journals

2023 - Pres.    Physical Review C, Monthly Notices of the Royal Astronomical Society  
 2022 - Pres.    Physical Review D

## Daily supervision

2023 - Pres.	Thibeaume Wouters	Ph.D. student	
2023 - Pres.	Sahil Jhavar	Master student	
2022	Henrik Rose	Master student	
2021 - 2022	Nina Kunert	Ph.D. student	
2019 - 2020	Adriaan Hengeveld	Master student	Radiation scientist at RIVM
2019	Yasmeen Asali	Bachelor student	Ph.D. student at Yale University

## Course tutored

2022	Master	Gravitational waves	University of Amsterdam
2021	Bachelor	Quantum Mechanics	Utrecht University
2021	Master	Gravitational waves	University of Amsterdam
2020	Bachelor	Quantum Mechanics	Utrecht University
2019	Master	Gravitational waves	University of Groningen
2017	Bachelor	Electromagnetic Theory I	The Chinese University of Hong Kong
2017	Bachelor	Introduction to Mechanics, Fluids & Waves	The Chinese University of Hong Kong
2016	Bachelor	Electromagnetic Theory I	The Chinese University of Hong Kong

## Summer school teaching

Sep	2023	Department of Physics, The Chinese University of Hong Kong	
Jul	2023	Zwicky Transient Facility (ZTF)	

## Research visit

Jul	2023	University of Potsdam	Potsdam, Germany
Jun	2023	KU Leuven	Leuven, Belgium
Dec	2018	Johns Hopkins University	Baltimore, USA

## Computer time allocations

2023 - 2024	Snellius at SURF Netherlands	PI of project EINF-6587	1.0 Mio CPUh
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## Talks

Sep	2023	Seminar at The Chinese University of Hong Kong (invited), Hong Kong <i>Constraining Neutron-Star Matter with Microscopic and Macroscopic Collisions</i>	
Jul	2023	Amaldi15, Online <i>Constraining Neutron-Star Matter with Microscopic and Macroscopic Collisions</i>	
Jun	2023	27th Symposium on Astroparticle Physics in the Netherlands (CAN) (invited), Amersfoort <i>Constraining Neutron-Star Matter with Microscopic and Macroscopic Collisions</i>	
Jun	2023	Seminar at KU Leuven (invited), Leuven <i>Constraining Neutron-Star Matter with Microscopic and Macroscopic Collisions</i>	
Dec	2021	Gravitational Wave Physics and Astronomy Workshop (GWPAW), Hannover <i>Constraining Neutron-Star Matter with Microscopic and Macroscopic Collisions</i>	
Nov	2021	Nederlandse Natuurkundige Vereniging Annual Meeting (NNV), Lunteren <i>Constraining Neutron-Star Matter with Microscopic and Macroscopic Collisions</i>	
Mar	2021	25th Symposium on Astroparticle Physics in the Netherlands (CAN), Online <i>Multimessenger constraints on the neutron-star equation of state and the Hubble constant</i>	
Jul	2020	Virgo week, Online <i>Parameter estimation for strong phase transitions in supranuclear matter using gravitational-wave astronomy</i>	
Jul	2019	GR22 / Amaldi13, Valencia <i>Model-agnostic test on gravitational-wave polarizations</i>	
Dec	2018	Seminar (invited), Baltimore <i>Model-agnostic test on gravitational-wave polarizations</i>	
Dec	2018	Gravitational Wave Physics and Astronomy Workshop (GWPAW), Baltimore <i>Model-agnostic test on gravitational-wave polarizations</i>	
Nov	2018	Nederlandse Natuurkundige Vereniging Annual Meeting (NNV), Lunteren <i>Method for searching for and testing general relativity with supernovae gravitational-wave signals</i>	