

Hao-Jui Kuan

Curriculum Vitae

Personal Data

Surname	Kuan
Name	Hao-Jui
Date of birth	13 July 1995
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Education

2019 - 2022	PhD in Theoretical Astrophysics (joint degree) University of Tübingen, Tübingen, Germany (IAAT) Advisor: Kostas D. Kokkotas Evaluation: summa cum laude
2017 - 2022	PhD in Physics (joint degree) National Tsing Hua University, Hsinchu, Taiwan (NTHU) Advisor: Chao-Qiang Geng
2013 - 2017	B.Sc Double major in Physics and Mathematics

Scientific summary

Number of first author articles	...	9
Refereed Articles	...	13
Preprints/journal submissions	...	11
h index (HEP-SPIRES)	...	7
Number of invited seminar	...	4

Awards, Honors, Fellowships & Grants

Grants

2020 - 2021	Principal Investigator of Sandwich-Scholarship Programme; 13,500 euro, funded by Deutscher Akademischer Austauschdienst (DAAD), and Ministry of Science and Technology, Taiwan (MOST) with funding ID being JYP 109-2927-I-007-503.
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Awards/Prizes

2023	2023 NCTS Student Outstanding Paper Award
2017 - 2020	Presidential Scholarship by NTHU for PhD applicants with excellent grades.

Full Presentations/Seminar List

2023

April 5	“Dynamical Scalarization during BNS mergers in scalar-Gauss-Bonnet”,
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- CoCoNut meeting, Potsdam, Germany.
- March 22 **"Packed Message delivered by Tides in Binary Neutron Star Mergers"**, parallel talk, SMuK2023, Technical University Dresden, Germany.
- March 16 **"Dynamical Scalarization during Neutron Star Mergers in scalar-Gauss-Bonnet Theory"**, invited seminar, University of Tübingen, Germany.
- February 3 **"Developing waveform involving dynamical tides"**, invited seminar, Academia Sinica, Taipei, Taiwan.
- February 2 **"Gravitational Phase Transition in Massive Scalar-tensor Theory"**, invited seminar, National Center for Theoretical Sciences, Hsinchu, Taiwan.

2022

- Sep 10 **"Premerger Neutron Star Physics"**, plenary talk, Eleventh Aegean summer school, Syros, Greece.
- Sep 08 **"Gravitational Phase Transition"**, parallel talk, Eleventh Aegean summer school, Syros, Greece.
- May 16-19 **"Tidal effects in the pre-merger stage of coalescing binary neutron stars"**, e-poster, PHAROS: The multi-messenger physics and astrophysics of neutron stars, Roma, Italy.
- Mar 3 **"Resonance shattering as triggers for precursors of SGRBs"**, parallel talk, DPG Meeting of the Matter and Cosmos Section (SMuK), Heidelberg, Germany. (remotely)

2021

- Aug30 - Sep3 **"Tidal g -mode resonances in coalescing binaries of neutron stars as triggers for precursor flares of short gamma-ray bursts"**, parallel talk
DPG Meeting of the Matter and Cosmos Section (SMuK), Bad Honnef, Germany. (remotely)
- July 27 **" g -mode resonances as triggers for precursors of SGRBs"**, invited talk
Grav@zon group seminar, Federal University of Pará, Pará, Brazil. (remotely)
- Jun 22 **"Dynamical formation of scalarized black holes and neutron stars through stellar core collapse"**, invited seminar
cosmo/GW journal club, Johns Hopkins University, Maryland, USA. (remotely)

2020

- Feb 24-28 **"Inverse-Chirp Imprint of GW in Scalar Tensor Theory"**, parallel talk
56th Karpacz Winter School in Theoretical Physics, Karpacz, Poland.

Teaching experience

- At NTHU** Teaching assistant for General Relativity (2016 Fall, 2018 Fall), Mathematical Physics (2017-2018), Thermal Physics (2016-2017), Calculus (2018-2019)
- At IAAT** Teaching assistant for Physical Practical (2021 Summer & Winter)
Teaching assistant for Grundkurs Elektromagnetismus (2022 Summer)

Miscellaneous

- Computer skills** Programming: Python, Fortran
Scientific software: Matlab, Mathematica, Gnuplot
- Language** English (fluent), Mandarin (Mother tongue), Japanese (fluent)

References

- **Prof. Dr. Kostas Kokkotas**
Theoretical Astrophysics (IAAT)

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○ **Prof. Dr. Masaru Shibata**

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○ **Dr. Daniela Doneva**

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○ **Dr. Arthur Suvorov**

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○ **Prof. Dr. Stoytcho Yazadjiev**

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Hao-Jui Kuan