Hao-Jui Kuan

Curriculum Vitae

Personal Data

Surname	Kuan
Name	Hao-Jui
Date of birth	13 July 1995
Citizenship	Taiwan
Email	hao-jui.kuan@uni-tuebingen.de

Education

2019 - **PhD in Theoretical Astrophysics (joint degree)**
University of Tübingen, Tübingen, Germany (IAAT)
Advisor: Kostas D. Kokkotas
Main arguments: Quasi-normal modes (QNMs) in Magnetars, evolutionary study of binaries, and QNMs asteroseismology.

2017 - **PhD in Physics (joint degree)**
National Tsing Hua University, Hsinchu, Taiwan (NTHU)
Advisor: Chao-Qiang Geng
Main arguments: Hydrodynamics simulation in alternative gravities

2013 - 2017 **B.Sc Double major in Physics and Mathematics**

Research interest

- Evolutionary study of the pre-merger dynamics of magnetized neutron stars
- Dynamical aspects of compact objects in alternative theories
- Quasi-normal mode asteroseismology via universal relations, and tidal effects in binaries

Publication summary

Refereed Articles	...	7	(1 PRL, 1 PRD, 2 MNRAS, 2 CQG, 1 EPJC)
Citations(ADS)	...	21	
Normalized Citations (ADS)	...	7.0	
h index (ADS)	...	3	

Awards, Honors, Fellowships & Grants

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

2017 - 2020 President's Scholarship by NTHU for PhD applicants with excellent grades.

Selected Presentations

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. (online)
July 27	"g-**mode resonances as triggers for precursors of SGRBs**", invited talk Grav@zon group seminar, Federal University of Pará, Pará, Brazil. (online)
Jun 22	"**Dynamical formation of scalarized black holes and neutron stars through stellar core collapse**", invited talk cosmo/GW journal club, Johns Hopkins University, Maryland, USA. (online)

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)

▬▬▬ Miscellaneous

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

▬▬▬ References

○ **Prof. Dr. Kostas Kokkotas**
Theoretical Astrophysics (IAAT)
Eberhard Karls Universität Tübingen
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○ **Prof. Dr. Chao-Qiang Geng**
Department of Physics
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○ **Prof. Dr. Stoytcho Yazadjiev**
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BG-Sofia 1504, Bulgaria
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○ **Dr. Daniela Doneva**
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○ **Dr. Arthur Suvorov**
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Tübingen
November 18, 2021

Hao-Jui Kuan