

TINGLONG FENG

Utrecht University
Institute for Theoretical Physics
3584 CC, Utrecht

t.feng@students.uu.nl
<https://arendelle-ftl.github.io/>

ACADEMIC INTERESTS

Compact object, cosmology, galaxy evolution

EDUCATION

Utrecht University

- M.S., Theoretical Physics (2024 - 2026).

Xi'an Jiaotong University

- B.S., Clinic Medicine (2019 - 2024).
- GPA for **all mathematics, physics and programming courses** (up to now): 3.60/4.30 or 87.87/100, including

Main Courses	Credits	Grades	Main Courses	Credits	Grades
Mathematical and Physical Equation	2	98	Electrodynamics	4	87
Complex Analysis and Integral Transformation	3	96	Quantum Field Theory	3	A
Thermodynamics and Statistical Physics I	4	94	Introductory General Relativity	2	A
Quantum Mechanics	4	89	Introduction to Group Theory	2	92
Theoretical Mechanics	3	89	Introduction to Elementary Particles	2	84

PUBLICATIONS AND PREPRINTS

Preprints

3. **Correlators for pseudo Hermitian systems** (joint with Y. Bai, S. Kim, C.Y. Lee, L.H. Liu, W. Zhao, S. Zhou). submitted. [preprint](#)
2. **Stability of the Potential Super Jupiter in Alpha Centauri System**. submitted. [preprint](#)
1. **Holographic Approach to Neutron Stars**. submitted. [preprint](#)

RESEARCH EXPERIENCE

Correlators for seudo Hermitian systems

- Supervisor: Prof. Siyi Zhou (Chongqing University)
- Time: January - August 2024
- State: Submitted to arXiv
- Abstract: We develop the in-in formalism to calculate cosmological correlation functions for pseudo-Hermitian systems.
- Detail: see [this website](#)

Graphene Production

- Supervisor: [Prof. Wei Wei](#) (Xi'an Jiaotong University)
- Time: September 2019 - May 2021
- State: Submitted to attend XJTU 'Tengfei Cup' Technology Innovation Competition
- Abstract: Innovative electrochemical exfoliation for high-quality graphene production.
- Detail: See [this website](#)

Health Economics Modelling of Infectious Disease

- Supervisor: Prof. Fan Zhang (Xi'an Jiaotong University)
- Time: May 2020 - May 2021
- State: Submitted to attend XJTU 'Tengfei Cup' Technology Innovation Competition
- Abstract: A new mathematical model to evaluate utilities of different ways to prevent infectious disease such as COVID-19.
- Detail: See [this website](#)

INVITED TALKS

1. *Introduction to 2019-nCoV*. online, February 19, 2020, Talk. [recording](#).

ORGANIZATION

Theoretical Physics Seminars

- September 2024: Host of Cosmology Seminars (reference: *Mukhanov's Cosmology*, seminar [recording](#))
- March 2024: Host of Astrophysics Seminars (reference: *Weinberg's Lectures on Astrophysics*, seminar [website](#), [recording](#))
- April 2021: Host of Quantum Mechanics Seminars (reference: *Landau Vol. 3* and *Dirac's Principle of QM*, seminar [website](#), [recording](#))
- February 2021: Host of Classical Electrodynamics Seminars (reference: *Landau Vol. 2*, seminar [website](#), [recording](#))
- April 2020: Host of Analytical Mechanics Seminars (reference: *Landau Vol. 1*, seminar [website](#), [recording](#))

United Academic Forum of Basic Science for Undergraduates

Developed and co-organized this communication platform designed for undergraduates from various universities, fostering collaboration and engagement in basic science research. See [this website](#).

- December 2020: Created 'inter-university forum of science' with undergraduates from USTC and NJU, co-organized the first research experience sharing activities. [website](#)
- February 2021: Co-organized 2021 winter seminars. Invited undergraduates from SJTU and UCAS to join the forum. [website](#)
 - [General Relativity Seminar](#). Host: [Qinxun Li](#) (undergraduate from USTC, current PhD student in Utah university)
 - [Statistical Mechanics Seminar](#). Host: Tingjun Zhang (undergraduate from NJU, current PhD student in Rice university), etc.
 - [Electrodynamics Seminar](#). Host: [Me](#).
- May 2021: Formalized 'inter-university forum of science' and changed its name to United Academic Forum of Basic Science for Undergraduates.
- August 2021: Co-organized the second research experience sharing activities. [website](#)
- September 2021 – February 2022: Held the position of the Executive Secretary-General of the Council of United Academic Forum of Basic Science for Undergraduates. [website](#)
 - Organized 2022 winter seminars
 - * [Electrodynamics Seminar](#). Host: [Xiaotian Feng](#), [Jingyuan Wang](#) (undergraduates from XJTU)

OUTREACH

- September 2020 – August 2021: Staff of [Scholastic Guidance Center of Qian Xuesen Honors College](#), Xi'an Jiaotong University
- Autumn 2021: Deputy editor-in-chief of [Journal of Zhufeng](#)
- September 2020 – : Peer reviewer of *Journal of Zhufeng*

COMPUTING

Familiar with C++, MATLAB, Mathematica, Python

LANGUAGE

Fluent in English (CEFR C1), capable of speaking a little Quenya ([my Quenya learning notes](#))