

Dr. Po-Hsun Tseng

6+ years experience of large-scale software development with C programming on the Linux system throughout my Ph.D. journey. Seeking a challenging and rewarding opportunity with low-level system programming (eg. device driver, Linux kernel, CPU architecture) to apply my skills at a fabless company.



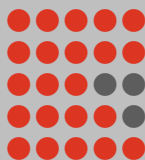
CONTACT

✉ zengbs@gmail.com
☎ +886 966 587 832
📍 Hsinchu, Taiwan
🐙 <https://github.com/zengbs>

SKILLS

Programming

- C
- Bash scripting
- System programming
- CUDA
- Python



Operating System

Linux - user
Linux - kernel



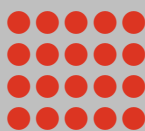
Architecture

ARM architecture



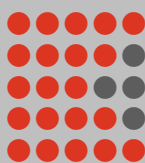
Software & Tools

- Git
- Vim
- Gdb
- Valgrind



Languages

Chinese (native)
English - writing
English - speaking
English - listening
English - reading



EDUCATION

Ph.D. in Computational Physics
📍 National Taiwan University, Taiwan
📅 08/2016 - 06/2022

- Developed and implemented a new algorithm to reduce numerical error by 10^6 compared to conventional one.
See Fig. 16 in (<https://arxiv.org/abs/2012.11130>).
- Designed a new approach to further promote the robustness of GAMER. The new approach was adopted in the research project led by Dr. Kuo-Chuan Pan from Tsing Hua University. (<https://github.com/gamer-project/gamer/pull/60>)
- Worked on improving the GAMER collaborated with Dr. Tzihong Chiueh and Dr. Hsi-Yu Schive. See the Section *References*.
- A main contributor of the GAMER.
(<https://github.com/gamer-project/gamer/graphs/contributors>)
- Built NIS, NFS, and Linux cluster from scratch with colleagues and worked with Dr. Hsi-Yu Schive to bootstrap simulations for research.

WORK HISTORY

01/2015 - 02/2016
📍 TDK corporation, Singapore
📅 Circuit designer

- Designed the circuit of surface acoustic wave(SAW) filters

Military service
📅 08/2013 - 08/2014

EDUCATION

M.Sc. in Physics
📍 National Taiwan University, Taiwan
📅 09/2011 - 07/2013

B.Sc. in Mathematics
📍 National Central University, Taiwan
📅 09/2006 - 07/2011

SOFT SKILLS

Nonverbal communication

Active listening

Open mindedness

Patience

Mutual respect

Teamwork

Brainstorming

Collaboration

GENERAL SKILLS

Numerical algorithm

Large-scale project


cscope



makefile

GNU autotools

PUBLICATIONS


An adaptive mesh, GPU-accelerated, and error minimized special relativistic hydrodynamics code

 **Po-Hsun Tseng**, Hsi-Yu Schive, Tzihong Chiueh

 2021  Monthly Notices of the Royal Astronomical Society Vol. 504, pp. 3298-3315
<https://arxiv.org/abs/2012.11130>

 [ADS](#)

The symmetry problem of the Fermi and eROSITA bubbles: A proof-of-concept study

 **Po-Hsun Tseng**, Hsiang-Yi Karen Yang, Hsi-Yu Schive, Chun-Yen Chen, Tzihong Chiueh










 2022  preprint



TALKS

- An adaptive-mesh, GPU-accelerated, and optimally error-controlled special relativistic hydrodynamics code
Oral (remote), American Center for Physics College Park, U.S.A Mar. 2021
- A new and accurate code for simulating special relativistic hydrodynamics
Oral, Annual Meeting of the Physical Society of Taiwan, NPTU. Feb. 2020

REFERENCES

- Please send an appointment letter to request a call. 😊
- Dr. Tzihong Chiueh
Distinguished Professor, Institute of Astrophysics, National Taiwan University
 Taipei 10617, Taiwan
 chiuehth@phys.ntu.edu.tw
 +886 2 3366 8628
- Dr. Hsi-Yu Schive
Assistant Professor, Institute of Astrophysics, National Taiwan University
 Taipei 10617, Taiwan
 hyschive@phys.ntu.edu.tw
 +886 2 3366 8644
- Dr. Hsiang-Yi Karen Yang
Assistant Professor, Institute of Astronomy, National Tsing Hua University
 Hsinchu 30013, Taiwan
 hyang@phys.nthu.edu.tw
 +886 3 574 2953