Curriculum Vitae – Chang-Goo Kim

Department of Astrophysical Sciences
Princeton University
4 Ivy Lane, Princeton
NJ 08544, USA

+1-609-933-1180
http://changgoo.github.io
ORCID: 0000-0003-2896-3725
cgkim@astro.princeton.edu

Education

Mar 2005 – Feb 2011	**Ph. D in Astronomy** Department of Physics and Astronomy, Seoul National University, Korea
Mar 2001 – Feb 2005	**B. S in Astronomy** Department of Physics and Astronomy, Seoul National University, Korea

Current position

Sep 2016 – present	**Associate Research Scholar** Department of Astrophysical Sciences, Princeton University

Employment

Sep 2017 – Aug 2018	**Flatiron Research Fellow** Center for Computational Astrophysics, Flatiron Institute
Sep 2013 – Aug 2016	**Postdoctoral Research Associate** Department of Astrophysical Sciences, Princeton University
Oct 2011 – Aug 2013	**CITA National Fellow** Department of Physics and Astronomy, University of Western Ontario, Canada

Grants

2022 – 2024	**PI**, NASA Astrophysics Theory Program; $415,564
2019	**PI**, Chandra cycle 21 (Theory); $85,000
2018 – 2021	**Co-I**, NASA TCAN (PI: Julian Borrill); $1,398,099

Research advising

2016 – present	**PhD thesis projects** Woorak Choi (Yonsei, current), Sanghyuk Moon (SNU, PhD in 2022), Lachlan Lancaster (Princeton, PhD in 2022), Alwin Mao (Princeton, PhD in 2020), Munan Gong (Princeton, PhD in 2017)
2018 – present	**Research projects for graduate students** Minghao Guo (Princeton, current), Nora Linzer (Princeton, current), Erin Kado-Fong (Princeton, 2018), Aditi Vijayan (CCA via KSPA, 2018), Kareem El-Badry (CCA via KSPA, 2018)
2014 – present	**Research projects for undergraduate students** Ish Kaul (Princeton, current), Ryan Golant (Princeton, 2019), Mohammad Refat (CCA via AstroCom NYC, 2018), Roberta Raileanu (Princeton, 2014)

Teaching

2021 – 2022	**Bootcamp Lecturer** - Teaching basic Unix commands and remote login (ssh), software version control (git and GitHub), Python programming language and scientific programming stack

2005 – 2010   **Graduate Student Instructor (Teaching Assistant)**
- Grading problem sets and leading problem-solving sessions for courses including *Solar System Astronomy and Lab., Astronomical Observation & Lab. I & II, Astronomy and Lab., Introduction to Astrophysics I & II, Stars and Stellar Systems, Man & the Universe.*
- Designing and leading the Lab class for Introduction to Astronomy
- Teaching scientific computing and numerical analysis – root-finding, numerical integration, linear algebra, linear regression

Computing time allocations

2022 – 2024   **15M CPU hrs (540k SBUs)**, NASA HECC, (**PI: Chang-Goo Kim**)
2018 – 2021   **80M CPU hrs**, NERSC, (PI: Julian Borrill)
2016 – 2021   **24M CPU hrs (850k SBUs)**, NASA HECC, (PI: Eve Ostriker)

Observing proposals

2019   **Co-I**, VLA Extra Large proposal (PI: Adam Leroy); Local Group L-Band Survey
2019   **Co-I**, VLA Regular proposal (PI: Woorak Choi), 7.4 hours, rank B

Scientific collaboration teams

2022 – present   **Working Group Leader**, Simons Collaboration on Learning the Universe
2017 – 2022   **Working Group Leader**, Simulating Multiscale Astrophysics to Understand Galaxies (SMAUG)
2018 – 2021   **Working Group Leader**, Modeling Polarized Galactic Foregrounds for Cosmic Microwave Background missions (NASA TCAN)
2022 – present   **Member**, Line Emission Mapper X-ray Probe
2021 – present   **Member**, Local Group L-Band Survey
2020 – present   **Member**, Galactic Australian Square Kilometre Array Pathfinder Survey
2019 – 2020   **Member**, Space Infrared Telescope for Cosmology and Astrophysics (SPICA)
2017 – 2019   **Member**, Probe of Inflation and Cosmic Origins (PICO)

Professional service

2020 – 2022   **Reviewer**, NASA FINESST
2017   **Review Panelist**, NSF AAG Program
2016 – 2017   **Organizer**, Star Formation/ISM Rendezvous Seminars at Princeton University
2012 – present   **Referee**, ApJ, ApJL, MNRAS, JOSS

References

Prof. Eve C. Ostriker eco@astro.princeton.edu
Department of Astrophysical Sciences, Princeton University
Prof. Rachel S. Somerville rsomerville@flatironinstitute.org
Center for Computational Astrophysics, Flatiron Institute
Prof. Greg L. Bryan gbryan@astro.columbia.edu
Department of Astronomy, Columbia University
Prof. James M. Stone jmstone@ias.edu
School of Natural Sciences, Institute for Advanced Study
Prof. Snezana Stanimirović sstanimi@astro.wisc.edu
Department of Astronomy, University of Wisconsin-Madison