## Masanobu Kunitomo

CONTACT INFORMATION	Department of Physics, Kurume University 67 Asahi-machi, Kurume, Fukuoka 830-0011, Japan Email: kunitomo.masanobu@gmail.com Phone: +81 (942) 31-7537	
PERSONAL INFORMATION	Gender: Male Date of Birth: March 26, 1988 Nationality: Japan	
ACADEMIC POSITIONS	JSPS Research Fellow Tokyo Institute of Technology, Japan	April 2012 – March 2015
	<b>Postdoctoral Fellow</b> Nagoya University, Japan	April 2015 – September 2017
	<b>Postdoctoral Fellow</b> The University of Tokyo, Japan	October 2017 – March 2019
	Assistant Professor Kurume University, Japan	April 2019 – December 2020
	Junior Associate Professor Kurume University, Japan	January 2021 – present
ACADEMIC DEGREES	<b>Bachelor of Science</b> Tokyo Institute of Technology, Japan Advisors: Shigeru Ida & Masahiro Ikoma	March 2010
	Master of Science Tokyo Institute of Technology, Japan Advisors: Shigeru Ida & Masahiro Ikoma Thesis: "The origin of the lack of close-in around $\sim 1.5-3 M_{\odot}$ red giants"	March 2012
	<b>Ph.D. of Science</b> Tokyo Institute of Technology, Japan Advisors: Shigeru Ida & Taku Takeuchi Thesis: "Evolution of Pre-Main Sequence Its Environmental Impact on Their Circur	

AFFILIATIONS	The Astronomical Society of Japan The Japanese Society for Planetary Sciences Japan Geoscience Union	
AWARD	Seiichi Tejima Doctoral Dissertation Award	February 2016
FELLOWSHIP	JSPS Research Fellow (DC1)	April 2012 – March 2015
TEACHING EXPERIENCE	Lecture on Basic Physics for 1st-year students of School for Medical Technology, Kurume University. 2019–.	
	Experiments on Basic Physics for 1st-year stu Kurume University. 2019–.	udents of School of Medicine,
	Lecture on Basic Physics for students in Dept. etc., Kurume University. 2020–.	of literature, economics, law,
RESEARCH INTERESTS	Star and planet formation Stellar structure and evolution Evolution of protoplanetary disks Planetary systems around intermediate-mass st Formation and evolution of giant planets	tars
PROFESSIONAL SKILLS	1D simulation of stellar/planetary evolutions 1D hydrodynamic simulation of accretion disks Observation at Okayama Astrophysical Observ	
REFEREED PUBLICATIONS	<b>Kunitomo, M.</b> , Ikoma, M., Sato, B., Katsuta "PLANET ENGULFMENT BY $\sim 1.5-3 M_{\odot}$ F The Astrophysical Journal, <b>737</b> , 66.	
	Delgado-Mena, E., Tsantaki, M., Sousa, S. G., "Searching for Li-rich giants in a sample of 12 o in two stars with substellar companions", <i>Ast</i> A66.	open clusters: Li enhancement
	Kimura, S. S., <b>Kunitomo, M.</b> & Takahashi, S. "From Birth to Death of Protoplanetary Disks Evolution, and Dispersal", <i>Monthly Notices of th</i> <b>461</b> , 2257.	s: Modeling Their Formation,
	Kunitomo, M., Guillot, T., Takeuchi, T. & Id "Revisiting the pre-main sequence evolution of s efficiency and deuterium abundance", <i>Astronom</i>	stars I. Importance of accretion

Curriculum Vitae

Tokuda, K., Onishi T., ..., **Kunitomo, M.** (9th author) et al., 2017, "A Detached Protostellar Disk around a  $\sim 0.2 M_{\odot}$  protostar in a Possible Site of a Multiple Star Formation in a Dynamical Environment in Taurus", *The Astrophysical Journal*, **849**, 101.

Kunitomo, M., Guillot, T., Ida, S. & Takeuchi, T., 2018, "Revisiting the pre-main sequence evolution of stars II. Consequences of planet formation on stellar surface composition", *Astronomy & Astrophysics*, **618**, A132.

Masuda, K., Kawahara, H., ..., **Kunitomo, M.** (5th author), et al., 2019, "Self-lensing Discovery of a  $0.2 M_{\odot}$  White Dwarf in an Unusually Wide Orbit Around a Sun-like Star", *The Astrophysical Journal Letters*, **881**, L3.

Higuchi, A., Saigo, K., ..., **Kunitomo, M.** (8th author) et al., 2019, "First sub-arcsecond submillimeter-wave [C I] image of 49 Ceti with ALMA", *The Astrophysical Journal*, **883**, 180.

Kunitomo, M., Suzuki, T. K., & Inutsuka, S., 2020, "Dispersal of protoplanetary discs by the combination of magnetically driven and photoevaporative winds", *Monthly Notices of the Royal Astronomical Society*, **492**, 3849.

Kimura, H., **Kunitomo**, M., Suzuki, T. K., Robrade, J. et al., 2020, "Hot grain dynamics by electric charging and magnetic trapping in debris disks", *Planetary and Space Science*, **183**, 104581.

Ogihara, M., **Kunitomo, M.**, & Hori, Y., 2020, "Unified Simulations of Planetary Formation and Atmospheric Evolution. II. Rapid Disk Clearing by Photoevaporation Yields Low-mass Super-Earth Atmospheres", *The Astrophysical Journal*, **899**, 91.

Takasao, S., Mitsuishi, I., ..., **Kunitomo, M.** (5th author) et al., 2020, "Investigation of Coronal Properties of X-Ray Bright G-dwarf Stars Based on the Solar Surface Magnetic Field-Corona Relationship", *The Astrophysical Journal*, **901**, 70.

Miley, J. M., Panić, O., ..., & **Kunitomo**, **M.** (6th author) 2021, "The impact of pre-main sequence stellar evolution on mid-plane snowline locations and C/O in planet forming discs", *Monthly Notices of the Royal Astronomical Society*, **500**, 4658.

Kunitomo, M., Ida, S., Takeuchi, T., Panić, O., Miley, J. M., et al., 2021, "Photoevaporative Dispersal of Protoplanetary Disks around Evolving Intermediate-mass Stars", *The Astrophysical Journal*, **909**, 109.

Curriculum Vitae

Ogihara, M., Hori, Y., **Kunitomo, M.**, & Kurosaki, K., 2021, "Formation of giant planets with large metal masses and metal fractions via giant impacts in a rapidly dissipating disk", *Astronomy and Astrophysics*, **648**, L1.

Mori, S., Okuzumi, S., **Kunitomo, M.**, & Bai, X.-N., 2021, "Evolution of the Water Snow Line in Magnetically Accreting Protoplanetary Disks", *The Astrophysical Journal*, **916**, 72.

Adibekyan, V., Dorn, C., ..., **Kunitomo, M.** (16th author), et al., 2021, "A compositional link between rocky exoplanets and their host stars", *Science*, **374**, 330.

Kunitomo, M., & Guillot, T., 2021, "Imprint of planet formation in the deep interior of the Sun", Astronomy and Astrophysics, 655, A51.

Liu, H., Herczeg, G. J., ..., **Kunitomo, M.** (10th author) et al., 2022, "Diagnosing FU Ori-like Sources: The Parameter Space of Viscously Heated Disks in the Optical and Near-infrared", *The Astrophysical Journal*, **936**, 152.

Kunitomo, M., Guillot, T., & Buldgen, G., 2022, "Evidence of a signature of planet formation processes from solar neutrino fluxes", *Astronomy and Astrophysics*, **667**, L2.

Teng, H.-Y., Sato, B., **Kunitomo, M.**, Takarada, T., et al., 2023, "A close-in planet orbiting giant star HD 167768", *Publications of the Astronomical Society of Japan*, **75**, 169.

Arzoumanian, D., Arakawa, S., ..., **Kunitomo, M.** (8th author) et al., 2023, "Insights on the Sun Birth Environment in the Context of Star Cluster Formation in Hub-Filament Systems", *The Astrophysical Journal*, **947**, L29.

OTHER PUBLICATIONS	<ul> <li>Kunitomo, M., Ikoma, M., Sato, B., Katsuta, Y. &amp; Ida, S., 2011,</li> <li>"Orbital Evolution of Planets around Intermediate-Mass Giants", American Institute of Physics Conference Series, 1331, 314.</li> </ul>
	Kunitomo, M., Guillot, T., Takeuchi, T., & Ida, S., 2017, "Revisiting the pre-main sequence evolution of stars: Importance of accretion efficiency and deuterium abundance", <i>Memorie della S.A.It.</i> , <b>88</b> , 795.
	Masuda, K., Kawahara, H.,, <b>Kunitomo, M.</b> , (5th author) et al. 2020, "Four New Self-lensing Binaries from Kepler: Radial Velocity Characteri- zation and Astrophysical Implications", <i>Proceedings of IAU Symposium No.</i> 357, 215—219.
	Kunitomo, M., Guillot, T., & Buldgen, G., 2023, "Solar neutrino fluxes show the signature of planet formation processes", Pro- ceedings of The 21st Cambridge workshop on Cool Stars, Stellar Systems, and the Sun.
SELECTED CONFERENCES	Kunitomo, M., Ikoma, M., Sato, B., Katsuta, Y., & Ida, S., 2010, "Orbital evolution of planets around intermediate-mass giants", 5th Annual EAPSNET Workshop, Weihai, China, contributed talk.
	Kunitomo, M., Takeuchi, T. & Ida, S., 2014, "Photoevaporating Disk Dispersal around Intermediate-Mass Stars", Herbig Ae/Be stars: The missing link in star formation, Santiago, Chile, contributed talk.
	Kunitomo, M., Guillot, T., Takeuchi, T. & Ida, S., 2017, "Revisiting the pre-main sequence evolution of stars: Importance of accretion efficiency and deuterium abundance", Francesco's Legacy: Star Formation in Space and Time, Florence, Italy, poster presentation.
	Kunitomo, M., Guillot, T., Takeuchi, T. & Ida, S., 2017, "Evaluating the imprints of planet formation on the compositions of stars", 10th RESCEU/Planet2 Symposium Planet Formation around Snowline, Tokyo, Japan, contributed talk.
	Kunitomo, M., Guillot, T., & Buldgen, G., 2022, "Solar neutrino fluxes show the signature of planet formation processes", Cool Stars 21, Toulouse, France, contributed talk.