

I-Non Chiu

邱奕儂

CONTACT INFORMATION

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Papers I led <https://ui.adsabs.harvard.edu/public-libraries/3yD2YvQQQ2G9G8TWm9VLbg>

RESEARCH INTERESTS

Observational Cosmology and Astrophysics, Cosmic Structure Formation, Galaxy Clusters, Gravitational Lensing, Galaxy Evolution, Data-driven methodology

EMPLOYMENTS

Associate Professor (tenure)	2026/02/01–
Physics Department, National Cheng Kung University	📍 Tainan City, Taiwan
Assistant Professor (tenure-track)	2022/08/01–2026/01/31
Physics Department, National Cheng Kung University	📍 Tainan City, Taiwan
Prize Postdoctoral Fellow	2021/02/20–2022/06/30
Tsung-Dao Lee Institute, Shanghai Jiao Tung University	📍 Shanghai, China
» Independent fellow	
Postdoctoral Fellow	2020/07/01–2020/12/31
Academia Sinica Institute of Astronomy and Astrophysics	📍 Taipei, Taiwan
» Supervisor: Keiichi Umetsu	
Postdoctoral Scholar	2018/07/01–2020/06/30
Academia Sinica and Academia Sinica Institute of Astronomy and Astrophysics	📍 Taipei, Taiwan
» Supervisor: Keiichi Umetsu	
Postdoctoral Fellow	2016/06/21–2018/06/30
Academia Sinica Institute of Astronomy and Astrophysics	📍 Taipei, Taiwan
» Supervisor: Keiichi Umetsu	
Private Soldier	2010/11/01–2011/10/01
Army in Taiwan	📍 Taiwan
» Mandatory military service	

EDUCATION

Ph.D., Physics	2012/09/05–2016/06/06
Ludwig-Maximilians-Universität	📍 Munich, Germany
» Dissertation: Studies of Baryon Content and Gravitational Lensing Effects in Galaxy Clusters	
» Supervisor: Joseph Mohr	
M.A., Astrophysics	2008/09/01–2010/10/30
National Taiwan University	📍 Taipei, Taiwan
» Dissertation: Testing Hydrostatic Equilibrium in Galaxy Clusters using X-ray and Optical Observations	
» Supervisor: Sandor Molnar, Pisin Chen	
B.A., Mathematics	2004/09/01–2008/06/30

National Taiwan University

📍 Taipei, Taiwan

High School Degree

2001/09/01–2004/06/30

Taipei Municipal Jianguo (Chien Kuo) High School

📍 Taipei, Taiwan

LEADERSHIPS AND MANAGEMENT ACTIVITIES

Task lead	Weak-Lensing Working Group in the <i>eROSITA</i> collaboration	2020/02/11 – 2026/01/30
SOC	Wide-Field Survey of Fast Radio Bursts and Future Cosmology (international conference)	2026/04/08 – 2026/04/11
Chair of LOC	Fast Radio Bursts in the Local Universe (international conference)	2025/05/23 – 2025/05/25
Project leader	Cluster Weak-Lensing Analysis in the <i>eROSITA</i> Final Equatorial-Depth Survey	2019/05/01 – 2021/06/28
Vice-chair	Cluster Working Group in the Hyper Suprime-Cam Survey	2018/01/01 – 2020/12/31
Chair	SUMIRE Bi-weekly Meeting at Academia Sinica Institute of Astronomy and Astrophysics	2017/09/01 – 2018/09/01

MEMBERSHIPS IN RESEARCH PROJECTS

Pipeline Scientist (data-right holder)	The Rubin Observatory within the Dark Energy Science Collaboration	2026/03/10 – present
Scientist	The Hyper Suprime-Cam Survey	2022/08/01 – present
External collaborator	The <i>eROSITA</i> Collaboration	2019/05/01 – present
External collaborator	The Hyper Suprime-Cam Survey	2021/01/20 – 2022/07/30
Scientist	<i>eROSITA</i> Final Equatorial-Depth Survey (eFEDS)	2019/05/01 – 2021/06/28
Scientist	Galaxy Clusters at Vircam (GCAV)	2016/10/01 – 2020/12/31
Scientist	The Hyper Suprime-Cam Survey	2016/06/21 – 2020/12/31
Scientist	Magnification Working Group of the <i>Euclid</i> mission	2017/10/01 – 2019/06/30
Scientist	Cluster Multi Probes in Three Dimensions (CLUMP-3D)	2016/06/21 – 2018/09/30
Scientist	International Team of Lensing Magnification at International Space Science Institute (ISSI)	2016/02/01 – 2017/10/30
External collaborator	The Dark Energy Survey	2013/09/30 – 2019/06/30
Scientist	The South Pole Telescope Sunyaev—Zel’dovich Survey	2012/09/05 – 2019/06/30

AWARDS AND FELLOWSHIPS

The PASJ Excellent Paper Award	2025
Publications of the Astronomical Society of Japan (JASJ)	📍 Japan
» Co-author of Akino et al. (2022)	
Tsung-Dao Lee Prize Postdoctoral Fellowship	2020
Shanghai Jiao Tung University	📍 China
Tsinghua Astrophysics Fellowship (TAF)	2020
Tsinghua University	📍 China
» (declined)	
KIAA Fellowship	2020
The Kavli Institute for Astronomy and Astrophysics at Peking University	📍 China
» (declined)	
“The highlight of the most important scientific results from Academia Sinica in 2018”	2018
Academia Sinica	📍 Taiwan
» This was awarded to my work Chiu et al. (2018)	

GRANTS

National Science and Technology Council (NSTC)	2025–2028 ($\approx$ \$167k)
Cosmology and Astrophysics from Weak-Lensing Shear-Selected Galaxy Clusters	📍 Taiwan
National Science and Technology Council (NSTC)	2022–2025 ($\approx$ \$196k)
Probing Dark Energy in Cluster Cosmology enabled by Weak Gravitational Lensing and X-Ray Sky Surveys	📍 Taiwan

ACADEMIC SERVICES

Proposal reviewer	National Science and Technology Council (NSTC)
	The Telescope Access Program (TAP)
Journal referee	Monthly Notices of the Royal Astronomical Society (MNRAS)
	Astronomy & Astrophysics (A&A)
	Astroparticle Physics
	New Astronomy

MENTORSHIPS

Ms. Yu-Shan Cheng	Master program at NCKU on a project of WL magnification around galaxy clusters	2025/01/12 –
Ms. Wen-Chi Hua	Master program at NCKU on a project of the stellar content of galaxy clusters	2024/02/27 –
Mr. Pin-Han Chen	Master program at NCKU on a project of measuring ellipticity of galaxy clusters	2024/02/27 – 2026/06/30
Ms. I-Hsuan Li	Undergraduate and Master programs at NCKU on a project of X-ray and WL analyses of galaxy clusters	2023/02/01 – 2026/07/30
Ms. Chen Chen	Undergraduate program at NCKU on a project of measuring the assembly bias → Graduate student in National Tsing Hua University	2025/09/17 – 2026/06/30
Ms. Chia-Chen Yu	Undergraduate program at NCKU on a project of the radial distribution of cluster member galaxies → Graduate student in National Taiwan University	2025/03/21 – 2026/06/30
Ms. Zi-Jia Lai	Master program at NCKU on a project of fast radio bursts → Research Assistant in Institute of Physics, Academia Sinica	2023/11/01 – 2026/03/11
Mr. Hung-Yu Lin	Master program at NCKU on a project of the conditional luminosity function of galaxy clusters. → Software industry	2023/09/01 – 2025/12/15
Mr. Cheng-Wei Lin	Research assistance at NCKU on a project of weak-lensing mass bias calibration → Ph.D. student at Massachusetts Institute of Technology	2023/03/01 – 2023/06/30
Ms. Shu-Ting Li	Co-supervision at Graduate Institute of Athletics and Coaching Science, National Taiwan Sport University, Taiwan. The student won the China Scholarship Council prize to start a Ph.D. program at University of Groningen in 2021. → Ph.D. candidate in University of Groningen	2018/07/01 – 2019/06/30
Mr. Ronaldo Laishram	Summer Student Program at Academia Sinica Institute of Astronomy and Astrophysics. The student received the MEXT fellowship for a graduate program at Tohoku University in 2019. → Ph.D. candidate in Tohoku University	2017/07/01 – 2017/08/30

Mr. Jhen-Hong Liao

Summer Student Program at Academia Sinica Institute of Astronomy and Astrophysics.
→ Fintech industry

TEACHING

2026-2027	Numerical Analyses in Physics (hands-on computational course) General Physics (standard lecture)
2025-2026	General Physics (standard lecture) General Physics (lecture + experiment-based sections)
2024-2025	Astronomy I and II (a full-year modern astronomy curriculum) General Physics (lecture + experiment-based sections) General Physics Experiments
2023-2024	Astronomy I and II (a full-year modern astronomy curriculum) General Physics (lecture + experiment-based sections) General Physics Experiments
2022-2023	Astronomy I General Physics (lecture + experiment-based sections) General Physics Experiments

PRESS RELEASE AND OUTREACH

Taiwanese media coverage on the eFEDS cosmological results National Cheng Kung University » Uncovering the nature of dark energy	2023 📍 Taiwan
Invited interview on the eFEDS cosmological results EurekAlert! » Cosmology: On the trail of a mysterious force in space » An interview on radio	2023 📍 Munich, Germany
Press release of the eFEDS cosmological results Ludwig-Maximilians-Universität » Cosmology: On the trail of a mysterious force in space » With Dr. Matthias Klein, Dr. Sebastian Bocquet, and Prof. Joseph Mohr	2023 📍 Munich, Germany
Press release of the <i>eROSITA</i> Early Data Release (EDR) Ludwig-Maximilians-Universität » Astrophysics: An appetizer to the all-sky banquet » With Dr. Klaus Dolag, Dr. Matthias Klein, Dr. Sebastian Grandis, and Prof. Joseph Mohr	2021 📍 Munich, Germany
Scientific article published in a magazine Issue 92 of Taipei Night Sky » An Overview of the Hubble Law (in Chinese)	2019 📍 Taipei, Taiwan
Outreach talk Taipei Astronomical Museum » A Brief Talk about Observational Cosmology (in Chinese)	2017 📍 Taipei, Taiwan

REFERRERS

(Alphabetical order)

Thomas Broadhurst  Full Professor

 Department of Theoretical Physics, University of the Basque Country

 tom.j.broadhurst@gmail.com

 <https://www.ikerbasque.net/en/thomas-broadhurst>

Joseph Mohr  Full Professor

 Faculty of Physics, Ludwig-Maximilians-Universität

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 <https://www.imprs-astro.mpg.de/content/prof-dr-joseph-mohr>

Masamune Oguri  Full Professor

 Department of Physics, Chiba University

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 <https://oguri.github.io/>

Nobuhiro Okabe  Associate Professor

 Physics Program, Graduate School of Advanced Science and Engineering, Hiroshima University

 okabe@hiroshima-u.ac.jp

 <http://theo.phys.sci.hiroshima-u.ac.jp/okabe/index.html>

Teppei Okumura  Full Research Fellow (equivalent of Full Professor)

 Academia Sinica Institute of Astronomy and Astrophysics

 tokumura@asiaa.sinica.edu.tw

 <http://idv.sinica.edu.tw/teppei/>

Keiichi Umetsu  Full Research Fellow (equivalent of Full Professor)

 Academia Sinica Institute of Astronomy and Astrophysics

 keiichi@asiaa.sinica.edu.tw

 <https://www.asiaa.sinica.edu.tw/people/cv.php?i=keiichi>

SELECTED PRESENTATIONS

- Contributed talk, **Gravitational Lensing at the turning point: Current Discoveries, New Frontiers**, Sesto, Italy, July, 2026, *Weak-Lensing Shear-Selected Galaxy Clusters in the Hyper Suprime-Cam Subaru Strategic Program and their Cosmological Applications*
- Invited talk, **The most massive galaxies and their environment across cosmic time**, Sesto, Italy, July, 2026, *Studying the galaxy populations of X-ray-selected galaxy clusters* (Invited)
- Contributed talk, **SMBH growth viewed with large field surveys: special focus on the initial results from Subaru PFS**, Taipei, Taiwan, Mar, 2026, *Studying the galaxy populations of X-ray-selected galaxy clusters*
- Invited talk, **The 2026 Annual Meeting of the Physical Society of Taiwan**, Chiayi, Taiwan, Jan, 2026, *Weak-Lensing Shear-Selected Galaxy Clusters in the Hyper Suprime-Cam Subaru Strategic Program* (Invited)
- Colloquium, American Museum of Natural History, New York City, United States, Dec, 2025, *Weak-Lensing Shear-Selected Galaxy Clusters in the Hyper Suprime-Cam Subaru Strategic Program* (Invited)
- Invited talk, **CL2025: Entering a Golden Age of Galaxy Cluster Studies**, Taipei, Taiwan, Sep, 2025, *Weak-Lensing Shear-Selected Galaxy Clusters in the Hyper Suprime-Cam Subaru Strategic Program* (Invited)
- Contributed talk, The 11th Galaxy Evolution Workshop, Nagoya, Japan, Aug, 2025, *the Stellar Mass-to-Halo Mass Relation of eROSITA Galaxy Clusters and Groups with The HSC Weak-Lensing Mass Calibration*
- Contributed talk, **Tracing Cosmic Evolution with Galaxy Clusters V**, Sesto, Italy, July, 2025, *Weak-Lensing Shear-Selected Galaxy Clusters in the Hyper Suprime-Cam Subaru Strategic Program*
- Contributed talk, the GSROC workshop, Tainan, Taiwan, June, 2025, *Cosmology with Weak-Lensing Shear-Selected Galaxy Clusters in the Hyper Suprime-Cam Survey*
- Teak talk, SLAC National Accelerator Laboratory, California, U.S.A., Apr, 2025, *Cosmology with Weak-Lensing Shear-Selected Galaxy Clusters in the Hyper Suprime-Cam Survey*
- Contributed talk, **KIAS Structure Formation workshop**, Gyeongju, Korea, Oct, 2024, *Cluster cosmology from the eROSITA Final Equatorial Depth Survey (eFEDS)—First Cosmological constraints from eROSITA clusters*
- Contributed talk, **COSMO24**, Kyoto, Japan, Oct, 2024, *Cosmological constraints from the abundance of shear-selected galaxy clusters in the Hyper Suprime-Cam Subaru Strategic Program*
- Colloquium, National Central University, Taoyuan, Taiwan, Sep, 2024, *Insights into Galaxy Clusters and Cosmology with eROSITA and HSC—Cosmological constraints from eROSITA and HSC weak-lensing shear-selected samples* (Invited)
- Contributed talk, **CosmoVerse@Krakow**, Krakow, Poland, July, 2024, *Cosmology from weak-lensing shear-selected galaxy clusters* Youtube link: <https://www.youtube.com/watch?v=VkJ0IU7iu7Js>
- Contributed talk, **Galaxy Groups in the era of eROSITA and Euclid**, Sesto, Italy, July, 2024, *Study galaxy properties of galaxy clusters and groups selected by the eROSITA telescope—Enabling the future Weak-lensing cluster cosmology*
- Colloquium, National Chung Cheng University, Chiayi, Taiwan, May, 2024, *Cosmology from galaxy clusters* (Invited)
- Colloquium, National Chung Hsing University, Taichung, Taiwan, May, 2024, *Cosmology from galaxy clusters* (Invited)
- Contributed talk, East Asian Young Astronomers Meeting (EAYAM), ChiangMai, Thailand, Jan, 2024, *Cosmological constraints from the abundance of shear-selected galaxy clusters in the Hyper Suprime-Cam Subaru Strategic Program*
- Contributed talk, Taiwan Physics Society Meeting, Taiwan, Jan, 2024, *Cosmological constraints from the abundance of shear-selected galaxy clusters in the Hyper Suprime-Cam Subaru Strategic Program*
- Cosmological seminar, Academia Sinica Institute of Astronomy and Astrophysics (ASIAA), Taipei, Taiwan, April, 2024, *Cosmological constraints from the abundance of shear-selected galaxy clusters in the Hyper Suprime-Cam Subaru Strategic Program*
- Colloquium, Leung Center for Cosmology and Particle Astrophysics (LeCosPA), National Taiwan University, Taipei, Taiwan, May, 2023, *First Cosmological constraints from eROSITA galaxy clusters* (Invited)
- Contributed talk, the conference **Future Science with CMB x LSS**, Yukawa Institute for Theoretical Physics, Kyoto University, Kyoto, Japan, April, 2023, *Cosmology from galaxy clusters in the eROSITA and HSC surveys*
- Colloquium, National Cheng Kung University (NCKU), Tainan, Taiwan, February, 2023, *Insights into Clusters and Cosmology with eROSITA and HSC—First Cosmological constraints from eROSITA clusters* (Invited)
- Journal Club, Institute for Fundamental Physics of the Universe (IFPU), Trieste, Italy, December, 2022, *Insights into Clusters and Cosmology with eROSITA and HSC—First Cosmological constraints from eROSITA clusters* (Invited)

- Colloquium, Ludwig-Maximilians-University (LMU), Munich, Germany, November, 2022, *Insights into Clusters and Cosmology with eROSITA and HSC—First Cosmological constraints from eROSITA clusters* (Invited)
- Colloquium, National Tsing Hua University (NTHU), Hsinchu, Taiwan, November, 2022, *Cosmological constraints from the eROSITA Final Equatorial-Depth Survey* (Invited)
- Colloquium, National Taiwan Normal University (NTNU), Taipei, Taiwan, November, 2022, *Cosmological constraints from the eROSITA Final Equatorial-Depth Survey* (Invited)
- Contributed talk, ASROC Annual Meeting, National Chung Cheng University, Chiayi, Taiwan, September, 2022, *Cosmological constraints from the eROSITA Final Equatorial-Depth Survey*
- Colloquium, Academia Sinica Institute of Astronomy and Astrophysics (ASIAA), Taipei, Taiwan, September, 2022, *Cosmological constraints from the eROSITA Final Equatorial-Depth Survey* (Invited)
- Astro-ph talk, National Tsing Hua University, Hsinchu, Taiwan, July, 2021, *The eROSITA Final Equatorial-Depth Survey (eFEDS): X-ray Observable-to-Mass-and-Redshift Relations of Galaxy Clusters and Groups with Weak-Lensing Mass Calibration from the Hyper Suprime-Cam Subaru Strategic Program Survey* (Invited)
- Contributed talk at the Special Session SS16, “Probing New Physics with Gravitational Cluster Lenses” in the **European Astronomical Society (EAS) Annual Meeting** in 2021, *The Weak-Lensing Mass Calibration of Galaxy Clusters detected by the eROSITA with the Hyper Suprime-Cam survey (at the European Astronomical Society Annual Meeting 2021)*
- Lunch talk, IPMU, Tokyo, Japan, June, 2020, *A clustering-based mass calibration of galaxy clusters: An application to a CAMIRA sample in the HSC survey* (Invited)
- Colloquium, Shanghai Jiao Tong University (SJTU), Shanghai, China, April, 2020, *Studying astrophysics and cosmology with galaxy clusters in multi-wavelength* (Invited)
- Matera Oscuro conference, Cosmology and Dark Matter within Galaxies and Clusters, Matera, Italy, September, 2019, *Constraining the Richness-to-Mass Relation of CAMIRA Clusters using the Lensing Effect of Magnification Bias in the HSC Survey*
- Seminar, INAF-Trieste, Trieste, Italy, 2019, *Studying Scaling Relations of Galaxy Clusters out to High Redshift* (Invited)
- **Panchromatic Panoramic Studies of Galaxy Clusters: from HSC to PFS and ULTIMATE**, Academia Sinica Institute of Astronomy and Astrophysics (ASIAA), Taipei City, Taiwan, 2019, *Constraining the richness-to-mass relation using the lensing magnification bias with the Hyper Suprime-Cam Survey*
- ICM Physics and Modelling, European Southern Observatory (ESO), Garching, Munich, Germany, 2018, *Baryon Content of SPT Selected Clusters* (Invited)
- Astrophysics Seminar, National Taiwan University (NTU), Taipei City, Taiwan, 2018, *Studying Scaling Relations of Galaxy Clusters out to High Redshift* (Invited)
- Lunch talk, ASIAA, Taipei, Taiwan, 2018, *X-ray Observable to Mass Scaling Relations of Galaxy Clusters at $0.2 < z < 1.5$ Observed with the XMM-Newton Telescope* (Invited)
- Cluster Group Meeting, Harvard-Smithsonian Center for Astrophysics (CfA), Cambridge, Boston, USA, 2018, *Studying Scaling Relations of Galaxy Clusters* (Invited)
- Talk, SnowCluster conference, Utah, USA, 2018, *Baryon Content in a Sample of 91 Galaxy Clusters Selected by the South Pole Telescope at $0.2 < z < 1.25$*
- TTTT seminar, National Tsing Hua University, Hsinchu, Taiwan, 2018, *Studying Cosmology with Galaxy Clusters* (Invited)
- Colloquium, Leung Center for Cosmology and Particle Astrophysics, National Taiwan University, Taipei, Taiwan, 2018, *Studying Cosmology with Galaxy Clusters* (Invited)
- Colloquium, Institute of Statistical Science Academia Sinica, Taipei, Taiwan, 2017, *Photometric Redshift Estimation* (Invited)
- Colloquium, Institute of Statistical Science Academia Sinica, Taipei, Taiwan, 2017, *Searching Galaxy Clusters with Modern Imaging Surveys* (Invited)
- Colloquium, National Central University, Taoyuan, Taiwan, 2017, *Studying Cosmology with Galaxy Clusters* (Invited)
- Student Meeting, ASIAA, Taipei, Taiwan, 2017, *An Introduction to Cluster Cosmology and Astrophysics* (Invited)
- Exploring dark matter and dark ages with lensing clusters, Sexten Center For Astrophysics, Sesto, Italy, 2017 *Triaxial Modelling of CLASH galaxy clusters with Weak Gravitational Lensing*

- Colloquium, ASIAA, Taipei, Taiwan, 2017, *Studying Cosmology with Galaxy Clusters* (Invited)
- Postdoc Meeting, ASIAA, Taipei, Taiwan, 2017, *Bayesian Programming in Python*
- Magnification workshop, International Space Science Institute, Bern, 2016, *Lensing Magnification around the galaxy clusters selected in the Deep Lens Survey*
- ASIAA Lunch Talk, ASIAA Taiwan, 2015, *Baryon Content of Massive Galaxy Clusters*
- MPA cosmological seminar, MPA Garching, Germany, 2015, *Probing Baryon Content in Massive Galaxy Clusters with the South Pole Telescope*
- IPMU seminar, Japan, 2015, *Lensing Magnification and Baryon Content of Massive Galaxy Clusters selected by the South Pole Telescope*
- Korea Astronomy and Space Science (KASI) seminar, KASI DaeJeon, South Korea, 2015, *Lensing Magnification and Baryon Content of Massive Galaxy Clusters selected by the South Pole Telescope*
- Seoul National University (SNU) seminar, Seoul, South Korea, *Lensing Magnification and Baryon Content of Massive Galaxy Clusters selected by the South Pole Telescope*
- ASIAA Lunch Talk, ASIAA Taiwan, 2015, *Density Enhancement of Background Galaxies Magnified by Massive Galaxy Clusters*
- ASIAA Lunch Talk, ASIAA Taiwan, 2013, *Baryon Fractions, Stellar Fractions and Cold Fractions of 14 Massive Sunyaev-Zeldovich Effect Selected Clusters at Redshift between 0.576 and 1.32*
- Weak Lensing Magnification Workshop, Institut de Ciències de l'Espai (IEEC/CSIC), Barcelona, 2013, *Cluster Weak Lensing: Magnification of the background galaxies*
- Particle, String and Cosmology international symposium in Taipei (PASCOS), Taipei Taiwan, 2013, *The structure formation of the universe: stellar and intracluster medium fractions of 14 massive south-pole-telescope- selected galaxy clusters in the high redshift 0.57 to 1.32.*

Posters

- SnowCluster conference, Utah, USA, 2018, *Weak Lensing Measurements of Magnification Bias around the optically selected galaxy clusters at $0.3 < z < 1.1$ from the Subaru Hyper Suprime-Cam (HSC) Strategic Survey*
- Let's Group Workshop 2015, MPA Garching, Germany, 2015, *Baryon Content of Massive Galaxy Clusters*
- Cluster Paris 2014, Paris, 2014, *Weak Lensing Magnification and the Evolution of the Baryon Composition in SPT Selected Clusters*

PUBLICATIONS

I have, as of April 2026, authored or co-authored 75 refereed publications, in which I led 15 as the first author or a co-lead author. I have total $\gtrsim 6500$ citations with h -index of 40 (Google Scholar statistics).

Link to the papers I led:

<https://ui.adsabs.harvard.edu/public-libraries/3yD2YvQQQ2G9G8TWm9VLbg>

A lay summary of my three selected publications

- **Chiu et al. 2024, Weak-Lensing Shear-Selected Galaxy Clusters from the Hyper Suprime-Cam Subaru Strategic Program: II. Cosmological Constraints from the Cluster Abundance**, *The Open Journal of Astrophysics* 7, 90 (2024) *Citations: 17*

Weak-lensing shear-selected galaxy clusters. Most of what we know about the Universe comes from studying the largest cosmic structures—galaxy clusters. Usually, clusters are identified by their hot gas or bright galaxies, but those signals can be biased by messy astrophysical processes. In this work, we showed for the first time that it is promising to constrain cosmology using clusters found purely through their gravitational “footprint”—the way their mass subtly distorts the images of background galaxies, a technique called weak gravitational lensing. This new approach avoids many of the uncertainties tied to gas or stars, and opens a fresh and independent route to test how the Universe evolves.

- **Chiu et al. 2023, Cosmological constraints from galaxy clusters and groups in the eROSITA final equatorial depth survey**, *MNRAS*, 522, 1601 (2023) *Citations: 66*

First cosmological analysis of eROSITA clusters. Galaxy clusters are powerful tools for measuring how the Universe is growing, but their usefulness depends on knowing how massive they are. In this study, we provided the very first cosmological analysis with galaxy clusters discovered by the eROSITA X-ray space telescope with precise mass measurements using weak gravitational lensing from the Subaru telescope. Our results laid the groundwork for the ongoing all-sky cosmology studies with eROSITA, and demonstrated the promise of joint X-ray and lensing surveys to sharpen our understanding of dark matter and dark energy.

- **Chiu et al. 2022, The eROSITA Final Equatorial-Depth Survey (eFEDS). X-ray observable-to-mass-and-redshift relations of galaxy clusters and groups with weak-lensing mass calibration from the Hyper Suprime-Cam Subaru Strategic Program survey**, *A&A*, 661, A11 (2022) *Citations: 84*

First WL mass calibration of eROSITA clusters. When eROSITA released its first set of X-ray data, thousands of new galaxy clusters were discovered. To make use of them for cosmology, accurate mass estimates were urgently needed. In this work, we provided the first such mass calibration by applying weak-lensing techniques to Subaru Hyper Suprime-Cam data. This is the most extensive weak-lensing study of X-ray-selected clusters. Our measurements significantly boosted the amount of science that could be extracted from the eROSITA Early Data Release, and represented a key step toward turning eROSITA into a leading cosmological experiment.

First-author, co-lead, or corresponding-author papers

★ = under my supervision

15. **An azimuthally resolved study of sloshing cold fronts in three nearby galaxy clusters**,
★Li, I.-H., S. Ueda, I.-N. Chiu, and K. Umetsu, arXiv e-prints, arXiv:2601.14392 (2026) 2026arXiv260114392L
Citations: 0
14. **The SRG/eROSITA All-Sky Survey: The weak-lensing mass calibration and the stellar mass-to-halo mass relation from the Hyper Suprime-Cam Subaru Strategic Program**,
Chiu, I.-N., V. Ghirardini, S. Grandis, N. Okabe, E. Artis, E. Bulbul, Y. Emre Bahar, F. Balzer, N. Clerc, J. Comparat, B.-C. Hsieh, F. Kleinebreil, M. Kluge, A. Liu, R. Monteiro-Oliveira, M. Oguri, F. Pacaud, M. Ramos Ceja, T. H. Reiprich, J. Sanders, T. Schrabback, R. Seppi, M. Sommer, S.-I. Tam, K. Umetsu, and X. Zhang, *A&A*, 704, A110 (2025) 2025A&A...704A.110C *Citations: 6*
13. **Weak-Lensing Shear-Selected Galaxy Clusters from the Hyper Suprime-Cam Subaru Strategic Program: II. Cosmological Constraints from the Cluster Abundance**,
Chiu, I.-N., K.-F. Chen, M. Oguri, M. M. Rau, T. Hamana, Y.-T. Lin, H. Miyatake, S. Miyazaki, S. More, T. Sunayama, S. Sugiyama, and M. Takada, *The Open Journal of Astrophysics*, 7, 90 (2024) 2024OJAp....7E..90C *Citations: 17*

12. **Cosmological constraints from galaxy clusters and groups in the eROSITA final equatorial depth survey,**
Chiu, I.-N., M. Klein, J. Mohr, and S. Bocquet, MNRAS, 522, 1601 (2023) 2023MNRAS.522.1601C *Citations: 66*
11. **The eROSITA Final Equatorial-Depth Survey (eFEDS). X-ray observable-to-mass-and-redshift relations of galaxy clusters and groups with weak-lensing mass calibration from the Hyper Suprime-Cam Subaru Strategic Program survey,**
Chiu, I.-N., V. Ghirardini, A. Liu, S. Grandis, E. Bulbul, Y. E. Bahar, J. Comparat, S. Bocquet, N. Clerc, M. Klein, T. Liu, X. Li, H. Miyatake, J. Mohr, S. More, M. Oguri, N. Okabe, F. Pacaud, M. E. Ramos-Ceja, T. H. Reiprich, T. Schrabback, and K. Umetsu, A&A, 661, A11 (2022) 2022A&A...661A..11C *Citations: 84*
10. **A clustering-based self-calibration of the richness-to-mass relation of CAMIRA galaxy clusters out to $z = 1.1$ in the Hyper Suprime-Cam survey,**
Chiu, I.-N., T. Okumura, M. Oguri, A. Agrawal, K. Umetsu, and Y.-T. Lin, MNRAS, 498, 2030 (2020) 2020MNRAS.498.2030C *Citations: 20*
9. **The richness-to-mass relation of CAMIRA galaxy clusters from weak-lensing magnification in the Subaru Hyper Suprime-Cam survey,**
Chiu, I.-N., K. Umetsu, R. Murata, E. Medezinski, and M. Oguri, MNRAS, 495, 428 (2020) 2020MNRAS.495..428C *Citations: 45*
8. **X-Ray Properties of SPT-selected Galaxy Clusters at $0.2 < z < 1.5$ Observed with XMM-Newton,**
Bulbul, E., I.-N. Chiu, J. J. Mohr, M. McDonald, B. Benson, M. W. Bautz, M. Bayliss, L. Bleem, M. Brodwin, S. Bocquet, R. Capasso, J. P. Dietrich, B. Forman, J. Hlavacek-Larrondo, W. L. Holzapfel, G. Khullar, M. Klein, R. Kraft, E. D. Miller, C. Reichardt, A. Saro, K. Sharon, B. Stalder, T. Schrabback, and A. Stanford, ApJ, 871, 50 (2019) 2019ApJ...871...50B *Citations: 126*
7. **Baryon content in a sample of 91 galaxy clusters selected by the South Pole Telescope at $0.2 < z < 1.25$,**
Chiu, I., J. J. Mohr, M. McDonald, S. Bocquet, S. Desai, M. Klein, H. Israel, M. L. N. Ashby, A. Stanford, B. A. Benson, M. Brodwin, T. M. C. Abbott, F. B. Abdalla, S. Allam, J. Annis, M. Bayliss, A. Benoit-Lévy, E. Bertin, L. Bleem, D. Brooks, E. Buckley-Geer, E. Bulbul, R. Capasso, J. E. Carlstrom, A. C. Rosell, J. Carretero, F. J. Castander, C. E. Cunha, C. B. D'Andrea, L. N. da Costa, C. Davis, H. T. Diehl, J. P. Dietrich, P. Doel, A. Drlica-Wagner, T. F. Eifler, A. E. Evrard, B. Flaugher, J. García-Bellido, G. Garmire, E. Gaztanaga, D. W. Gerdes, A. Gonzalez, D. Gruen, R. A. Gruendl, J. Gschwend, N. Gupta, G. Gutierrez, J. Hlavacek-L., K. Honscheid, D. J. James, T. Jeltema, R. Kraft, E. Krause, K. Kuehn, S. Kuhlmann, N. Kuropatkin, O. Lahav, M. Lima, M. A. G. Maia, J. L. Marshall, P. Melchior, F. Menanteau, R. Miquel, S. Murray, B. Nord, R. L. C. Ogando, A. A. Plazas, D. Rapetti, C. L. Reichardt, A. K. Romer, A. Roodman, E. Sanchez, A. Saro, V. Scarpine, R. Schindler, M. Schubnell, K. Sharon, R. C. Smith, M. Smith, M. Soares-Santos, F. Sobreira, B. Stalder, C. Stern, V. Strazzullo, E. Suchyta, M. E. C. Swanson, G. Tarle, V. Vikram, A. R. Walker, J. Weller, and Y. Zhang, MNRAS, 478, 3072 (2018) 2018MNRAS.478.3072C *Citations: 109*
6. **CLUMP-3D: Three-dimensional Shape and Structure of 20 CLASH Galaxy Clusters from Combined Weak and Strong Lensing,**
Chiu, I.-N., K. Umetsu, M. Sereno, S. Ettori, M. Meneghetti, J. Merten, J. Sayers, and A. Zitrin, ApJ, 860, 126 (2018) 2018ApJ...860..126C *Citations: 38*
5. **ComEst: A completeness estimator of source extraction on astronomical imaging,**
Chiu, I., S. Desai, and J. Liu, Astronomy and Computing, 16, 79 (2016) 2016A&C....16...79C *Citations: 3*
4. **Stellar mass to halo mass scaling relation for X-ray-selected low-mass galaxy clusters and groups out to redshift $z \approx 1$,**
Chiu, I., A. Saro, J. Mohr, S. Desai, S. Bocquet, R. Capasso, C. Gangkofner, N. Gupta, and J. Liu, MNRAS, 458, 379 (2016) 2016MNRAS.458..379C *Citations: 26*
3. **Detection of enhancement in number densities of background galaxies due to magnification by massive galaxy clusters,**
Chiu, I., J. P. Dietrich, J. Mohr, D. E. Applegate, B. A. Benson, L. E. Bleem, M. B. Bayliss, S. Bocquet, J. E. Carlstrom, R. Capasso, S. Desai, C. Gangkofner, A. H. Gonzalez, N. Gupta, C. Hennig, H. Hoekstra, A. von der Linden, J. Liu, M. McDonald, C. L. Reichardt, A. Saro, T. Schrabback, V. Strazzullo, C. W. Stubbs, and A. Zenteno, MNRAS, 457, 3050 (2016) 2016MNRAS.457.3050C *Citations: 32*
2. **Baryon content of massive galaxy clusters at $0.57 < z < 1.33$,**
Chiu, I., J. Mohr, M. McDonald, S. Bocquet, M. L. N. Ashby, M. Bayliss, B. A. Benson, L. E. Bleem, M.

Brodwin, S. Desai, J. P. Dietrich, W. R. Forman, C. Gangkofner, A. H. Gonzalez, C. Hennig, J. Liu, C. L. Reichardt, A. Saro, B. Stalder, S. A. Stanford, J. Song, T. Schrabback, R. Šuhada, V. Strazzullo, and A. Zenteno, *MNRAS*, 455, 258 (2016) 2016MNRAS.455..258C *Citations: 69*

1. **Testing Hydrostatic Equilibrium in Galaxy Cluster MS 2137,**
Chiu, I.-N. T. and S. M. Molnar, *ApJ*, 756, 1 (2012) 2012ApJ...756....1C *Citations: 17*

Papers which I am the second author or I made significant contributions to

★ = under my supervision

4. **Weak-Lensing Shear-Selected Galaxy Clusters from the Hyper Suprime-Cam Subaru Strategic Program: I. Cluster Catalog, Selection Function and Mass-Observable Relation,**
★Chen, K.-F., I.-N. Chiu, M. Oguri, Y.-T. Lin, H. Miyatake, S. Miyazaki, S. More, T. Hamana, M. M. Rau, T. Sunayama, S. Sugiyama, and M. Takada, *The Open Journal of Astrophysics*, 8, 2 (2025) 2025OJAp....8E...2C *Citations: 10*
3. **Angular clustering and host halo properties of [O II] emitters at $z \lesssim 1$ in the Subaru HSC survey,**
Okumura, T., M. Hayashi, I.-N. Chiu, Y.-T. Lin, K. Osato, B.-C. Hsieh, and S.-C. Lin, *PASJ*, 73, 1186 (2021) 2021PASJ...73.1186O *Citations: 17*
2. **The Pre-merger Impact Velocity of the Binary Cluster A1750 from X-Ray, Lensing, and Hydrodynamical Simulations,**
Molnar, S. M., I.-N. T. Chiu, T. Broadhurst, and J. G. Stadel, *ApJ*, 779, 63 (2013) 2013ApJ...779...63M *Citations: 26*
1. **Testing Strict Hydrostatic Equilibrium in Simulated Clusters of Galaxies: Implications for A1689,**
Molnar, S. M., I.-N. Chiu, K. Umetsu, P. Chen, N. Hearn, T. Broadhurst, G. Bryan, and C. Shang, *ApJ*, 724, L1 (2010) 2010ApJ...724L...1M *Citations: 28*

Other papers

My authorship in the following paper is merited and granted by the leading authors, because I provided constructed comments or was partly involved in the analysis that directly benefited the quality of the papers.

56. **Catalogs of optically selected clusters and photometric luminous red galaxies from the Hyper Suprime-Cam Subaru Strategic Program final-year dataset,**
Oguri, M., Y.-T. Lin, N. Okabe, N. Ota, I.-N. Chiu, M. Fujikawa, H.-Y. Jian, T. Kodama, L. Lin, A. J. Nishizawa, R. Shimakawa, and Y. Toba, *PASJ*, 78, 416 (2026) 2026PASJ...78..416O *Citations: 0*
55. **Simulation-Based Cosmological Mass Calibration of XXL Galaxy Clusters using HSC Weak Lensing,**
Tam, S.-I., K. Umetsu, A. Amara, D. Eckert, M. Regamey, N. Cerardi, I.-N. Chiu, M. Sereno, F. Pacaud, S. Bhargava, C. Garrel, F. Gastaldello, E. Koulouridis, B. Maughan, R. Monteiro-Oliveira, and M. Pierre, *arXiv e-prints*, arXiv:2602.11989 (2026) 2026arXiv260211989T *Citations: 0*
54. **The eROSITA Final Equatorial-Depth Survey (eFEDS): X-ray stacking analysis of Subaru's optically selected clusters spanning low richness regime,**
Nguyen-Dang, N. T., N. Ota, N. Okabe, M. Oguri, I. Mitsuishi, T. H. Reiprich, F. Pacaud, E. Bulbul, J. S. Sanders, M. Brüggen, A. Liu, Y. Tsujita, I. Chiu, V. Ghirardini, S. Grandis, M. Klein, K. Migkas, H. Miyatake, S. Miyazaki, and M. E. Ramos-Ceja, *arXiv e-prints*, arXiv:2512.06138 (2025) 2025arXiv251206138N *Citations: 2*
53. **The SRG/eROSITA All-Sky Survey: Constraints on ultralight axion dark matter through galaxy cluster number counts,**
Zelmer, S., E. Artis, E. Bulbul, S. Grandis, V. Ghirardini, A. von der Linden, Y. E. Bahar, F. Balzer, M. Brüggen, I. Chiu, N. Clerc, J. Comparat, F. Kleinebreil, M. Kluge, S. Krippendorf, A. Liu, N. Malavasi, A. Merloni, H. Miyatake, S. Miyazaki, K. Nandra, N. Okabe, M. E. Ramos-Ceja, J. S. Sanders, T. Schrabback, R. Seppi, J. Weller, and X. Zhang, *A&A*, 704, A346 (2025) 2025A&A...704A.346Z *Citations: 5*
52. **The SRG/eROSITA all-sky survey: Subaru/HSC-SSP weak-lensing mass measurements for eRASS1 galaxy clusters,**
Okabe, N., T. H. Reiprich, S. Grandis, I.-N. Chiu, M. Oguri, K. Umetsu, E. Bulbul, E. Bahar, F. Balzer, N. Clerc, J. Comparat, V. Ghirardini, F. Kleinebreil, M. Kluge, A. Liu, R. Monteiro-Oliveira, F. Pacaud, M. R. Ceja, J. Sanders, T. Schrabback, R. Seppi, M. Sommer, and X. Zhang, *A&A*, 700, A46 (2025) 2025A&A...700A..46O *Citations: 13*

51. **The SRG/eROSITA All-Sky Survey: Constraints on the structure growth from cluster number counts**, Artis, E., E. Bulbul, S. Grandis, V. Ghirardini, N. Clerc, R. Seppi, J. Comparat, M. Cataneo, A. von der Linden, Y. E. Bahar, F. Balzer, **I. Chiu**, D. Gruen, F. Kleinebreil, M. Kluge, S. Krippendorf, X. Li, A. Liu, N. Malavasi, A. Merloni, H. Miyatake, S. Miyazaki, K. Nandra, N. Okabe, F. Pacaud, P. Predehl, M. E. Ramos-Ceja, T. H. Reiprich, J. S. Sanders, T. Schrabback, S. Zelmer, and X. Zhang, *A&A*, 696, A5 (2025) 2025A&A...696A...5A Citations: 15
50. **The SRG/eROSITA All-Sky Survey: Weak lensing of eRASS1 galaxy clusters in KiDS-1000 and consistency checks with DES Y3 and HSC-Y3**, Kleinebreil, F., S. Grandis, T. Schrabback, V. Ghirardini, **I. Chiu**, A. Liu, M. Kluge, T. H. Reiprich, E. Artis, Y. E. Bahar, F. Balzer, E. Bulbul, N. Clerc, J. Comparat, C. Garrel, D. Gruen, X. Li, H. Miyatake, S. Miyazaki, M. E. Ramos-Ceja, J. Sanders, R. Seppi, N. Okabe, and X. Zhang, *A&A*, 695, A216 (2025) 2025A&A...695A.216K Citations: 33
49. **The SRG/eROSITA All-Sky Survey: Constraints on $f(R)$ gravity from cluster abundances**, Artis, E., V. Ghirardini, E. Bulbul, S. Grandis, C. Garrel, N. Clerc, R. Seppi, J. Comparat, M. Cataneo, Y. E. Bahar, F. Balzer, **I. Chiu**, D. Gruen, F. Kleinebreil, M. Kluge, S. Krippendorf, X. Li, A. Liu, A. Merloni, H. Miyatake, S. Miyazaki, K. Nandra, N. Okabe, F. Pacaud, P. Predehl, M. E. Ramos-Ceja, T. H. Reiprich, J. S. Sanders, T. Schrabback, S. Zelmer, and X. Zhang, *A&A*, 691, A301 (2024) 2024A&A...691A.301A Citations: 22
48. **Optical cluster cosmology with SDSS redMaPPer clusters and HSC-Y3 lensing measurements**, Sunayama, T., H. Miyatake, S. Sugiyama, S. More, X. Li, R. Dalal, M. M. Rau, J. Shi, **I.-non . Chiu**, M. Shirasaki, T. Zhang, and A. J. Nishizawa, *Phys. Rev. D*, 110, 083511 (2024) 2024PhRvD.110h3511S Citations: 34
47. **The SRG/eROSITA all-sky survey: Cosmology constraints from cluster abundances in the western Galactic hemisphere**, Ghirardini, V., E. Bulbul, E. Artis, N. Clerc, C. Garrel, S. Grandis, M. Kluge, A. Liu, Y. E. Bahar, F. Balzer, **I. Chiu**, J. Comparat, D. Gruen, F. Kleinebreil, S. Krippendorf, A. Merloni, K. Nandra, N. Okabe, F. Pacaud, P. Predehl, M. E. Ramos-Ceja, T. H. Reiprich, J. S. Sanders, T. Schrabback, R. Seppi, S. Zelmer, X. Zhang, W. Bornemann, H. Brunner, V. Burwitz, D. Coutinho, K. Dennerl, M. Freyberg, S. Friedrich, R. Gaida, A. Gueguen, F. Haberl, W. Kink, G. Lamer, X. Li, T. Liu, C. Maitra, N. Meidinger, S. Mueller, H. Miyatake, S. Miyazaki, J. Robrade, A. Schwobe, and I. Stewart, *A&A*, 689, A298 (2024) 2024A&A...689A.298G Citations: 153
46. **The SRG/eROSITA All-Sky Survey: Dark Energy Survey year 3 weak gravitational lensing by eRASS1 selected galaxy clusters**, Grandis, S., V. Ghirardini, S. Bocquet, C. Garrel, J. J. Mohr, A. Liu, M. Kluge, L. Kimmig, T. H. Reiprich, A. Alarcon, A. Amon, E. Artis, Y. E. Bahar, F. Balzer, K. Bechtol, M. R. Becker, G. Bernstein, E. Bulbul, A. Campos, A. Carnero Rosell, M. Carrasco Kind, R. Cawthon, C. Chang, R. Chen, **I. Chiu**, A. Choi, N. Clerc, J. Comparat, J. Cordero, C. Davis, J. Deroose, H. T. Diehl, S. Dodelson, C. Doux, A. Drlica-Wagner, K. Eckert, J. Elvin-Poole, S. Everett, A. Ferte, M. Gatti, G. Giannini, P. Giles, D. Gruen, R. A. Gruendl, I. Harrison, W. G. Hartley, K. Herner, E. M. Huff, F. Kleinebreil, N. Kuropatkin, P. F. Leget, N. Maccrann, J. McCullough, A. Merloni, J. Myles, K. Nandra, A. Navarro-Alsina, N. Okabe, F. Pacaud, S. Pandey, J. Prat, P. Predehl, M. Ramos, M. Raveri, R. P. Rollins, A. Roodman, A. J. Ross, E. S. Rykoff, C. Sanchez, J. Sanders, T. Schrabback, L. F. Secco, R. Seppi, I. Sevilla-Noarbe, E. Sheldon, T. Shin, M. Troxel, I. Tutusaus, T. N. Varga, H. Wu, B. Yanny, B. Yin, X. Zhang, Y. Zhang, O. Alves, S. Bhargava, D. Brooks, D. L. Burke, J. Carretero, M. Costanzi, L. N. da Costa, M. E. S. Pereira, J. De Vicente, S. Desai, P. Doel, I. Ferrero, B. Flaugher, D. Friedel, J. Frieman, J. García-Bellido, G. Gutierrez, S. R. Hinton, D. L. Hollowood, K. Honscheid, D. J. James, N. Jeffrey, O. Lahav, S. Lee, J. L. Marshall, F. Menanteau, R. L. C. Ogando, A. Pieres, A. A. Plazas Malagón, A. K. Romer, E. Sanchez, M. Schubnell, M. Smith, E. Suchyta, M. E. C. Swanson, G. Tarle, N. Weaverdyck, and J. Weller, *A&A*, 687, A178 (2024) 2024A&A...687A.178G Citations: 52
45. **Survey of gravitationally lensed objects in HSC imaging (SuGOHI) - IX. Discovery of strongly lensed quasar candidates**, Chan, J. H. H., K. C. Wong, X. Ding, D. Chao, **I.-N. Chiu**, A. T. Jaelani, I. Kayo, A. More, M. Oguri, and S. H. Suyu, *MNRAS*, 527, 6253 (2024) 2024MNRAS.527.6253C Citations: 16
44. **The eROSITA Final Equatorial-Depth Survey (eFEDS) - Splashback radius of X-ray galaxy clusters using galaxies from HSC survey**, Rana, D., S. More, H. Miyatake, S. Grandis, M. Klein, E. Bulbul, **I.-N. Chiu**, S. Miyazaki, and N. Bahcall, *MNRAS*, 522, 4181 (2023) 2023MNRAS.522.4181R Citations: 14

43. **The eROSITA Final Equatorial-Depth Survey (eFEDS). X-ray properties of Subaru's optically selected clusters,**
Ota, N., N. T. Nguyen-Dang, I. Mitsuishi, M. Oguri, M. Klein, N. Okabe, M. E. Ramos-Ceja, T. H. Reiprich, F. Pacaud, E. Bulbul, M. Brüggen, A. Liu, K. Migkas, **I. Chiu**, V. Ghirardini, S. Grandis, Y.-T. Lin, H. Miyatake, S. Miyazaki, and J. S. Sanders, *A&A*, 669, A110 (2023) 2023A&A...669A.110O Citations: 17
42. **Line-of-sight Elongation and Hydrostatic Mass Bias of the Frontier Fields Galaxy Cluster Abell 370,**
Umetsu, K., S. Ueda, B.-C. Hsieh, M. Nonino, **I.-N. Chiu**, M. Oguri, S. M. Molnar, A. M. Koekemoer, and S.-I. Tam, *ApJ*, 934, 169 (2022) 2022ApJ...934..169U Citations: 10
41. **Groups and Protocluster Candidates in the CLAUDS and HSC-SSP Joint Deep Surveys,**
Li, Q., X. Yang, C. Liu, Y. Jing, M. He, J.-S. Huang, Y. S. Dai, M. Sawicki, S. Arnouts, S. Gwyn, T. Moutard, H. J. Mo, K. Wang, A. Katsianis, W. Cui, J. Han, **I.-N. Chiu**, Y. Gu, and H. Xu, *ApJ*, 933, 9 (2022) 2022ApJ...933....9L Citations: 19
40. **The eROSITA Final Equatorial-Depth Survey (eFEDS). A complete census of X-ray properties of Subaru Hyper Suprime-Cam weak lensing shear-selected clusters in the eFEDS footprint,**
Ramos-Ceja, M. E., M. Oguri, S. Miyazaki, V. Ghirardini, **I. Chiu**, N. Okabe, A. Liu, T. Schrabback, D. Akino, Y. E. Bahar, E. Bulbul, N. Clerc, J. Comparat, S. Grandis, M. Klein, Y.-T. Lin, A. Merloni, I. Mitsuishi, H. Miyatake, S. More, K. Nandra, A. J. Nishizawa, N. Ota, F. Pacaud, T. H. Reiprich, and J. S. Sanders, *A&A*, 661, A14 (2022) 2022A&A...661A..14R Citations: 16
39. **The eROSITA Final Equatorial-Depth Survey (eFEDS). X-ray properties and scaling relations of galaxy clusters and groups,**
Bahar, Y. E., E. Bulbul, N. Clerc, V. Ghirardini, A. Liu, K. Nandra, F. Pacaud, **I.-N. Chiu**, J. Comparat, J. Ider-Chitham, M. Klein, T. Liu, A. Merloni, K. Migkas, N. Okabe, M. E. Ramos-Ceja, T. H. Reiprich, J. S. Sanders, and T. Schrabback, *A&A*, 661, A7 (2022) 2022A&A...661A...7B Citations: 63
38. **The eROSITA Final Equatorial-Depth Survey (eFEDS). Optical confirmation, redshifts, and properties of the cluster and group catalog,**
Klein, M., M. Oguri, J. J. Mohr, S. Grandis, V. Ghirardini, T. Liu, A. Liu, E. Bulbul, J. Wolf, J. Comparat, M. E. Ramos-Ceja, J. Buchner, **I. Chiu**, N. Clerc, A. Merloni, H. Miyatake, S. Miyazaki, N. Okabe, N. Ota, F. Pacaud, M. Salvato, and S. P. Driver, *A&A*, 661, A4 (2022) 2022A&A...661A...4K Citations: 46
37. **The eROSITA Final Equatorial-Depth Survey (eFEDS). Catalog of galaxy clusters and groups,**
Liu, A., E. Bulbul, V. Ghirardini, T. Liu, M. Klein, N. Clerc, Y. Özsoy, M. E. Ramos-Ceja, F. Pacaud, J. Comparat, N. Okabe, Y. E. Bahar, V. Biffi, H. Brunner, M. Brüggen, J. Buchner, J. Ider Chitham, **I. Chiu**, K. Dolag, E. Gatzert, J. Gonzalez, D. N. Hoang, G. Lamer, A. Merloni, K. Nandra, M. Oguri, N. Ota, P. Predehl, T. H. Reiprich, M. Salvato, T. Schrabback, J. S. Sanders, R. Seppi, and Q. Thibaud, *A&A*, 661, A2 (2022) 2022A&A...661A...2L Citations: 149
36. **HSC-XXL: Baryon budget of the 136 XXL groups and clusters,**
Akino, D., D. Eckert, N. Okabe, M. Sereno, K. Umetsu, M. Oguri, F. Gastaldello, **I.-N. Chiu**, S. Ettori, A. E. Evrard, A. Farahi, B. Maughan, M. Pierre, M. Ricci, I. Valtchanov, I. McCarthy, S. McGee, S. Miyazaki, A. J. Nishizawa, and M. Tanaka, *PASJ*, 74, 175 (2022) 2022PASJ...74..175A Citations: 79
35. **Active gas features in three HSC-SSP CAMIRA clusters revealed by high angular resolution analysis of MUSTANG-2 SZE and XXL X-ray observations,**
Okabe, N., S. Dicker, D. Eckert, T. Mroczkowski, F. Gastaldello, Y.-T. Lin, M. Devlin, C. E. Romero, M. Birkinshaw, C. Sarazin, C. Horellou, T. Kitayama, K. Umetsu, M. Sereno, B. S. Mason, J. A. ZuHone, A. Honda, H. Akamatsu, **I.-N. Chiu**, K. Kohno, K.-Y. Lin, E. Medezinski, S. Miyazaki, I. Mitsuishi, A. J. Nishizawa, M. Oguri, N. Ota, F. Pacaud, M. Pierre, J. Sievers, V. Smolčić, S. Stanchfield, K. Tanaka, R. Yamamoto, C. Yang, and A. Yoshida, *MNRAS*, 501, 1701 (2021) 2021MNRAS.501.1701O Citations: 17
34. **The Radial Acceleration Relation in CLASH Galaxy Clusters,**
Tian, Y., K. Umetsu, C.-M. Ko, M. Donahue, and **I.-N. Chiu**, *ApJ*, 896, 70 (2020) 2020ApJ...896...70T Citations: 58
33. **Constraining radio mode feedback in galaxy clusters with the cluster radio AGNs properties to $z \sim 1$,**
Gupta, N., M. Pannella, J. J. Mohr, M. Klein, E. S. Rykoff, J. Annis, S. Avila, F. Bianchini, D. Brooks, E. Buckley-Geer, E. Bulbul, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, **I. Chiu**, M. Costanzi, L. N. da Costa, J. De Vicente, S. Desai, J. P. Dietrich, P. Doel, S. Everett, A. E. Evrard, J. García-Bellido, E. Gaztanaga, D. Gruen, R. A. Gruendl, J. Gschwend, G. Gutierrez, D. L. Hollowood, K. Honscheid, D. J. James, T. Jeltema, K. Kuehn, C. Lidman, M. Lima, M. A. G. Maia, J. L. Marshall, M. McDonald,

- F. Menanteau, R. Miquel, R. L. C. Ogando, A. Palmese, F. Paz-Chinchón, A. A. Plazas, C. L. Reichardt, E. Sanchez, B. Santiago, A. Saro, V. Scarpine, R. Schindler, M. Schubnell, S. Serrano, I. Sevilla-Noarbe, X. Shao, M. Smith, J. P. Stott, V. Strazzullo, E. Suchyta, M. E. C. Swanson, V. Vikram, and A. Zenteno, *MNRAS*, 494, 1705 (2020) 2020MNRAS.494.1705G *Citations*: 10
32. **XXL Survey groups and clusters in the Hyper Suprime-Cam Survey. Scaling relations between X-ray properties and weak lensing mass**,
Serenio, M., K. Umetsu, S. Ettori, D. Eckert, F. Gastaldello, P. Giles, M. Lieu, B. Maughan, N. Okabe, M. Birkinshaw, **I.-N. Chiu**, Y. Fujita, S. Miyazaki, D. Rapetti, E. Koulouridis, and M. Pierre, *MNRAS*, 492, 4528 (2020) 2020MNRAS.492.4528S *Citations*: 35
 31. **An X-ray detection of star formation in a highly magnified giant arc**,
Bayliss, M. B., M. McDonald, K. Sharon, M. D. Gladders, M. Florian, J. Chisholm, H. Dahle, G. Mahler, R. Paterno-Mahler, J. R. Rigby, E. Rivera-Thorsen, K. E. Whitaker, S. Allen, B. A. Benson, L. E. Bleem, M. Brodwin, R. E. A. Canning, **I. Chiu**, J. Hlavacek-Larrondo, G. Khullar, C. Reichardt, and J. D. Vieira, *Nature Astronomy*, 4, 159 (2020) 2020NatAs...4..159B *Citations*: 9
 30. **Weak-lensing Analysis of X-Ray-selected XXL Galaxy Groups and Clusters with Subaru HSC Data**,
Umetsu, K., M. Sereno, M. Lieu, H. Miyatake, E. Medezinski, A. J. Nishizawa, P. Giles, F. Gastaldello, I. G. McCarthy, M. Kilbinger, M. Birkinshaw, S. Ettori, N. Okabe, **I.-N. Chiu**, J. Coupon, D. Eckert, Y. Fujita, Y. Higuchi, E. Koulouridis, B. Maughan, S. Miyazaki, M. Oguri, F. Pacaud, M. Pierre, D. Rapetti, and G. P. Smith, *ApJ*, 890, 148 (2020) 2020ApJ...890..148U *Citations*: 94
 29. **Cluster Cosmology Constraints from the 2500 deg² SPT-SZ Survey: Inclusion of Weak Gravitational Lensing Data from Magellan and the Hubble Space Telescope**,
Bocquet, S., J. P. Dietrich, T. Schrabbach, L. E. Bleem, M. Klein, S. W. Allen, D. E. Applegate, M. L. N. Ashby, M. Bautz, M. Bayliss, B. A. Benson, M. Brodwin, E. Bulbul, R. E. A. Canning, R. Capasso, J. E. Carlstrom, C. L. Chang, **I. Chiu**, H.-M. Cho, A. Clocchiatti, T. M. Crawford, A. T. Crites, T. de Haan, S. Desai, M. A. Dobbs, R. J. Foley, W. R. Forman, G. P. Garmire, E. M. George, M. D. Gladders, A. H. Gonzalez, S. Grandis, N. Gupta, N. W. Halverson, J. Hlavacek-Larrondo, H. Hoekstra, G. P. Holder, W. L. Holzapfel, Z. Hou, J. D. Hrubes, N. Huang, C. Jones, G. Khullar, L. Knox, R. Kraft, A. T. Lee, A. von der Linden, D. Luong-Van, A. Mantz, D. P. Marrone, M. McDonald, J. J. McMahon, S. S. Meyer, L. M. Mocanu, J. J. Mohr, R. G. Morris, S. Padin, S. Patil, C. Pryke, D. Rapetti, C. L. Reichardt, A. Rest, J. E. Ruhl, B. R. Saliwanchik, A. Saro, J. T. Sayre, K. K. Schaffer, E. Shirokoff, B. Stalder, S. A. Stanford, Z. Staniszewski, A. A. Stark, K. T. Story, V. Strazzullo, C. W. Stubbs, K. Vanderlinde, J. D. Vieira, A. Vikhlinin, R. Williamson, and A. Zenteno, *ApJ*, 878, 55 (2019) 2019ApJ...878...55B *Citations*: 383
 28. **Weak-lensing analysis of SPT-selected galaxy clusters using Dark Energy Survey Science Verification data**,
Stern, C., J. P. Dietrich, S. Bocquet, D. Applegate, J. J. Mohr, S. L. Bridle, M. Carrasco Kind, D. Gruen, M. Jarvis, T. Kacprzak, A. Saro, E. Sheldon, M. A. Troxel, J. Zuntz, B. A. Benson, R. Capasso, **I. Chiu**, S. Desai, D. Rapetti, C. L. Reichardt, B. Saliwanchik, T. Schrabbach, N. Gupta, T. M. C. Abbott, F. B. Abdalla, S. Avila, E. Bertin, D. Brooks, D. L. Burke, A. Carnero Rosell, J. Carretero, F. J. Castander, C. B. D'Andrea, L. N. da Costa, C. Davis, J. De Vicente, H. T. Diehl, P. Doel, J. Estrada, A. E. Evrard, B. Flaugher, P. Fosalba, J. Frieman, J. García-Bellido, E. Gaztanaga, R. A. Gruendl, J. Gschwend, G. Gutierrez, D. Hollowood, T. Jeltema, D. Kirk, K. Kuehn, N. Kuropatkin, O. Lahav, M. Lima, M. A. G. Maia, M. March, P. Melchior, F. Menanteau, R. Miquel, A. A. Plazas, A. K. Romer, E. Sanchez, R. Schindler, M. Schubnell, I. Sevilla-Noarbe, M. Smith, R. C. Smith, F. Sobreira, E. Suchyta, M. E. C. Swanson, G. Tarle, A. R. Walker, DES Collaboration, and SPT Collaboration, *MNRAS*, 485, 69 (2019) 2019MNRAS.485...69S *Citations*: 31
 27. **Sunyaev-Zel'dovich effect and X-ray scaling relations from weak lensing mass calibration of 32 South Pole Telescope selected galaxy clusters**,
Dietrich, J. P., S. Bocquet, T. Schrabbach, D. Applegate, H. Hoekstra, S. Grandis, J. J. Mohr, S. W. Allen, M. B. Bayliss, B. A. Benson, L. E. Bleem, M. Brodwin, E. Bulbul, R. Capasso, **I. Chiu**, T. M. Crawford, A. H. Gonzalez, T. de Haan, M. Klein, A. von der Linden, A. B. Mantz, D. P. Marrone, M. McDonald, S. Raghunathan, D. Rapetti, C. L. Reichardt, A. Saro, B. Stalder, A. Stark, C. Stern, and C. Stubbs, *MNRAS*, 483, 2871 (2019) 2019MNRAS.483.2871D *Citations*: 100
 26. **Galaxy populations in the most distant SPT-SZ clusters. I. Environmental quenching in massive clusters at $1.4 \lesssim z \lesssim 1.7$** ,
Strazzullo, V., M. Pannella, J. J. Mohr, A. Saro, M. L. N. Ashby, M. B. Bayliss, S. Bocquet, E. Bulbul, G. Khullar, A. B. Mantz, S. A. Stanford, B. A. Benson, L. E. Bleem, M. Brodwin, R. E. A. Canning, R.

- Capasso, I. Chiu, A. H. Gonzalez, N. Gupta, J. Hlavacek-Larrondo, M. Klein, M. McDonald, E. Noordeh, D. Rapetti, C. L. Reichardt, T. Schrabback, K. Sharon, and B. Stalder, *A&A*, 622, A117 (2019) 2019A&A...622A.117S *Citations*: 68
25. **Galaxy kinematics and mass calibration in massive SZE-selected galaxy clusters to $z = 1.3$,**
Capasso, R., A. Saro, J. J. Mohr, A. Biviano, S. Bocquet, V. Strazzullo, S. Grandis, D. E. Applegate, M. B. Bayliss, B. A. Benson, L. E. Bleem, M. Brodwin, E. Bulbul, J. E. Carlstrom, I. Chiu, J. P. Dietrich, N. Gupta, T. de Haan, J. Hlavacek-Larrondo, M. Klein, A. von der Linden, M. McDonald, D. Rapetti, C. L. Reichardt, K. Sharon, B. Stalder, S. A. Stanford, A. A. Stark, C. Stern, and A. Zenteno, *MNRAS*, 482, 1043 (2019) 2019MNRAS.482.1043C *Citations*: 33
 24. **A Detailed Study of the Most Relaxed SPT-selected Galaxy Clusters: Properties of the Cool Core and Central Galaxy,**
McDonald, M., S. W. Allen, J. Hlavacek-Larrondo, A. B. Mantz, M. Bayliss, B. A. Benson, M. Brodwin, E. Bulbul, R. E. A. Canning, I. Chiu, W. R. Forman, G. P. Garmire, N. Gupta, G. Khullar, J. J. Mohr, C. L. Reichardt, and T. Schrabback, *ApJ*, 870, 85 (2019) 2019ApJ...870...85M *Citations*: 74
 23. **Spectroscopic Confirmation of Five Galaxy Clusters at $z \lesssim 1.25$ in the 2500 deg² SPT-SZ Survey,**
Khullar, G., L. E. Bleem, M. B. Bayliss, M. D. Gladders, B. A. Benson, M. McDonald, S. W. Allen, D. E. Applegate, M. L. N. Ashby, S. Bocquet, M. Brodwin, E. Bulbul, R. E. A. Canning, R. Capasso, I. Chiu, T. M. Crawford, T. de Haan, J. P. Dietrich, A. H. Gonzalez, J. Hlavacek-Larrondo, H. Hoekstra, W. L. Holzapfel, A. von der Linden, A. B. Mantz, S. Patil, C. L. Reichardt, A. Saro, K. Sharon, B. Stalder, S. A. Stanford, A. A. Stark, and V. Strazzullo, *ApJ*, 870, 7 (2019) 2019ApJ...870....7K *Citations*: 24
 22. **CLUMP-3D: Testing Λ CDM with Galaxy Cluster Shapes,**
Serenio, M., K. Umetsu, S. Ettori, J. Sayers, I.-N. Chiu, M. Meneghetti, J. Vega-Ferrero, and A. Zitrin, *ApJ*, 860, L4 (2018) 2018ApJ...860L...4S *Citations*: 46
 21. **The Projected Dark and Baryonic Ellipsoidal Structure of 20 CLASH Galaxy Clusters,**
Umetsu, K., M. Sereno, S.-I. Tam, I.-N. Chiu, Z. Fan, S. Ettori, D. Gruen, T. Okumura, E. Medezinski, M. Donahue, M. Meneghetti, B. Frye, A. Koekemoer, T. Broadhurst, A. Zitrin, I. Balestra, N. Benítez, Y. Higuchi, P. Melchior, A. Mercurio, J. Merten, A. Molino, M. Nonino, M. Postman, P. Rosati, J. Sayers, and S. Seitz, *ApJ*, 860, 104 (2018) 2018ApJ...860..104U *Citations*: 68
 20. **Cluster mass calibration at high redshift: HST weak lensing analysis of 13 distant galaxy clusters from the South Pole Telescope Sunyaev-Zel'dovich Survey,**
Schrabback, T., D. Applegate, J. P. Dietrich, H. Hoekstra, S. Bocquet, A. H. Gonzalez, A. von der Linden, M. McDonald, C. B. Morrison, S. F. Raihan, S. W. Allen, M. Bayliss, B. A. Benson, L. E. Bleem, I. Chiu, S. Desai, R. J. Foley, T. de Haan, F. W. High, S. Hilbert, A. B. Mantz, R. Massey, J. Mohr, C. L. Reichardt, A. Saro, P. Simon, C. Stern, C. W. Stubbs, and A. Zenteno, *MNRAS*, 474, 2635 (2018) 2018MNRAS.474.2635S *Citations*: 120
 19. **Planck Sunyaev-Zel'dovich cluster mass calibration using Hyper Suprime-Cam weak lensing,**
Medezinski, E., N. Battaglia, K. Umetsu, M. Oguri, H. Miyatake, A. J. Nishizawa, C. Sifón, D. N. Spergel, I.-N. Chiu, Y.-T. Lin, N. Bahcall, and Y. Komiyama, *PASJ*, 70, S28 (2018) 2018PASJ...70S..28M *Citations*: 62
 18. **Multiwavelength study of X-ray luminous clusters in the Hyper Suprime-Cam Subaru Strategic Program S16A field,**
Miyaoka, K., N. Okabe, T. Kitaguchi, M. Oguri, Y. Fukazawa, R. Mandelbaum, E. Medezinski, Y. Babazaki, A. J. Nishizawa, T. Hamana, Y.-T. Lin, H. Akamatsu, I.-N. Chiu, Y. Fujita, Y. Ichinohe, Y. Komiyama, T. Sasaki, M. Takizawa, S. Ueda, K. Umetsu, J. Coupon, C. Hikage, A. Hoshino, A. Leauthaud, K. Matsushita, I. Mitsuishi, H. Miyatake, S. Miyazaki, S. More, K. Nakazawa, N. Ota, K. Sato, D. Spergel, T. Tamura, M. Tanaka, M. M. Tanaka, and Y. Utsumi, *PASJ*, 70, S22 (2018) 2018PASJ...70S..22M *Citations*: 15
 17. **An optically-selected cluster catalog at redshift $0.1 < z < 1.1$ from the Hyper Suprime-Cam Subaru Strategic Program S16A data,**
Oguri, M., Y.-T. Lin, S.-C. Lin, A. J. Nishizawa, A. More, S. More, B.-C. Hsieh, E. Medezinski, H. Miyatake, H.-Y. Jian, L. Lin, M. Takada, N. Okabe, J. S. Speagle, J. Coupon, A. Leauthaud, R. H. Lupton, S. Miyazaki, P. A. Price, M. Tanaka, I.-N. Chiu, Y. Komiyama, Y. Okura, M. M. Tanaka, and T. Usuda, *PASJ*, 70, S20 (2018) 2018PASJ...70S..20O *Citations*: 185
 16. **Optical-SZE scaling relations for DES optically selected clusters within the SPT-SZ Survey,**
Saro, A., S. Bocquet, J. Mohr, E. Rozo, B. A. Benson, S. Dodelson, E. S. Rykoff, L. Bleem, T. M. C. Abbott, F. B. Abdalla, S. Allen, J. Annis, A. Benoit-Lévy, D. Brooks, D. L. Burke, R. Capasso, A. Carnero Rosell,

- M. Carrasco Kind, J. Carretero, **I. Chiu**, T. M. Crawford, C. E. Cunha, C. B. D'Andrea, L. N. da Costa, S. Desai, J. P. Dietrich, A. E. Evrard, A. F. Neto, B. Flaugher, P. Fosalba, J. Frieman, C. Gangkofner, E. Gaztanaga, D. W. Gerdes, T. Giannantonio, S. Grandis, D. Gruen, R. A. Gruendl, N. Gupta, G. Gutierrez, W. L. Holzapfel, D. J. James, K. Kuehn, N. Kuropatkin, M. Lima, J. L. Marshall, M. McDonald, P. Melchior, F. Menanteau, R. Miquel, R. Ogando, A. A. Plazas, D. Rapetti, C. L. Reichardt, K. Reil, A. K. Romer, E. Sanchez, V. Scarpine, M. Schubnell, I. Sevilla-Noarbe, R. C. Smith, M. Soares-Santos, B. Soergel, V. Strazzullo, E. Suchyta, M. E. C. Swanson, G. Tarle, D. Thomas, V. Vikram, A. R. Walker, and A. Zenteno, *MNRAS*, 468, 3347 (2017) 2017MNRAS.468.3347S *Citations*: 19
15. **Galaxy populations in massive galaxy clusters to $z = 1.1$: colour distribution, concentration, halo occupation number and red sequence fraction**,
Hennig, C., J. J. Mohr, A. Zenteno, S. Desai, J. P. Dietrich, S. Bocquet, V. Strazzullo, A. Saro, T. M. C. Abbott, F. B. Abdalla, M. Bayliss, A. Benoit-Lévy, R. A. Bernstein, E. Bertin, D. Brooks, R. Capasso, D. Capozzi, A. Carnero, M. Carrasco Kind, J. Carretero, **I. Chiu**, C. B. D'Andrea, L. N. da Costa, H. T. Diehl, P. Doel, T. F. Eifler, A. E. Evrard, A. Fausti-Neto, P. Fosalba, J. Frieman, C. Gangkofner, A. Gonzalez, D. Gruen, R. A. Gruendl, N. Gupta, G. Gutierrez, K. Honscheid, J. Hlavacek-Larrondo, D. J. James, K. Kuehn, N. Kuropatkin, O. Lahav, M. March, J. L. Marshall, P. Martini, M. McDonald, P. Melchior, C. J. Miller, R. Miquel, E. Neilsen, B. Nord, R. Ogando, A. A. Plazas, C. Reichardt, A. K. Romer, E. Rozo, E. S. Rykoff, E. Sanchez, B. Santiago, M. Schubnell, I. Sevilla-Noarbe, R. C. Smith, M. Soares-Santos, F. Sobreira, B. Stalder, S. A. Stanford, E. Suchyta, M. E. C. Swanson, G. Tarle, D. Thomas, V. Vikram, A. R. Walker, and Y. Zhang, *MNRAS*, 467, 4015 (2017) 2017MNRAS.467.4015H *Citations*: 76
 14. **CLUMP-3D: three-dimensional lensing and multi-probe analysis of MACS J1206.2-0847, a remarkably regular cluster**,
Serenio, M., S. Ettori, M. Meneghetti, J. Sayers, K. Umetsu, J. Merten, **I.-N. Chiu**, and A. Zitrin, *MNRAS*, 467, 3801 (2017) 2017MNRAS.467.3801S *Citations*: 31
 13. **High-frequency cluster radio galaxies: luminosity functions and implications for SZE-selected cluster samples**,
Gupta, N., A. Saro, J. J. Mohr, B. A. Benson, S. Bocquet, R. Capasso, J. E. Carlstrom, **I. Chiu**, T. M. Crawford, T. de Haan, J. P. Dietrich, C. Gangkofner, W. L. Holzapfel, M. McDonald, D. Rapetti, and C. L. Reichardt, *MNRAS*, 467, 3737 (2017) 2017MNRAS.467.3737G *Citations*: 25
 12. **Velocity Segregation and Systematic Biases In Velocity Dispersion Estimates with the SPT-GMOS Spectroscopic Survey**,
Bayliss, M. B., K. Zengo, J. Ruel, B. A. Benson, L. E. Bleem, S. Bocquet, E. Bulbul, M. Brodwin, R. Capasso, **I.-N. Chiu**, M. McDonald, D. Rapetti, A. Saro, B. Stalder, A. A. Stark, V. Strazzullo, C. W. Stubbs, and A. Zenteno, *ApJ*, 837, 88 (2017) 2017ApJ...837...88B *Citations*: 21
 11. **SPT-GMOS: A Gemini/GMOS-South Spectroscopic Survey of Galaxy Clusters in the SPT-SZ Survey**,
Bayliss, M. B., J. Ruel, C. W. Stubbs, S. W. Allen, D. E. Applegate, M. L. N. Ashby, M. Bautz, B. A. Benson, L. E. Bleem, S. Bocquet, M. Brodwin, R. Capasso, J. E. Carlstrom, C. L. Chang, **I. Chiu**, H.-M. Cho, A. Clocchiatti, T. M. Crawford, A. T. Crites, T. de Haan, S. Desai, J. P. Dietrich, M. A. Dobbs, A. N. Doucouliagos, R. J. Foley, W. R. Forman, G. P. Garmire, E. M. George, M. D. Gladders, A. H. Gonzalez, N. Gupta, N. W. Halverson, J. Hlavacek-Larrondo, H. Hoekstra, G. P. Holder, W. L. Holzapfel, Z. Hou, J. D. Hrubes, N. Huang, C. Jones, R. Keisler, L. Knox, A. T. Lee, E. M. Leitch, A. von der Linden, D. Luong-Van, A. Mantz, D. P. Marrone, M. McDonald, J. J. McMahon, S. S. Meyer, L. M. Mocz, J. J. Mohr, S. S. Murray, S. Padin, C. Pryke, D. Rapetti, C. L. Reichardt, A. Rest, J. E. Ruhl, B. R. Saliwanchik, A. Saro, J. T. Sayre, K. K. Schaffer, T. Schrabbach, E. Shirokoff, J. Song, H. G. Spieler, B. Stalder, S. A. Stanford, Z. Staniszewski, A. A. Stark, K. T. Story, K. Vanderlinde, J. D. Vieira, A. Vikhlinin, R. Williamson, and A. Zenteno, *ApJS*, 227, 3 (2016) 2016ApJS..227....3B *Citations*: 48
 10. **Cosmological Constraints from Galaxy Clusters in the 2500 Square-degree SPT-SZ Survey**,
de Haan, T., B. A. Benson, L. E. Bleem, S. W. Allen, D. E. Applegate, M. L. N. Ashby, M. Bautz, M. Bayliss, S. Bocquet, M. Brodwin, J. E. Carlstrom, C. L. Chang, **I. Chiu**, H.-M. Cho, A. Clocchiatti, T. M. Crawford, A. T. Crites, S. Desai, J. P. Dietrich, M. A. Dobbs, A. N. Doucouliagos, R. J. Foley, W. R. Forman, G. P. Garmire, E. M. George, M. D. Gladders, A. H. Gonzalez, N. Gupta, N. W. Halverson, J. Hlavacek-Larrondo, H. Hoekstra, G. P. Holder, W. L. Holzapfel, Z. Hou, J. D. Hrubes, N. Huang, C. Jones, R. Keisler, L. Knox, A. T. Lee, E. M. Leitch, A. von der Linden, D. Luong-Van, A. Mantz, D. P. Marrone, M. McDonald, J. J. McMahon, S. S. Meyer, L. M. Mocz, J. J. Mohr, S. S. Murray, S. Padin, C. Pryke, D. Rapetti, C. L. Reichardt, A. Rest, J. Ruel, J. E. Ruhl, B. R. Saliwanchik, A. Saro, J. T. Sayre, K. K. Schaffer, T. Schrabbach, E. Shirokoff, J. Song, H. G. Spieler, B. Stalder, S. A. Stanford, Z. Staniszewski, A. A. Stark,

K. T. Story, C. W. Stubbs, K. Vanderlinde, J. D. Vieira, A. Vikhlinin, R. Williamson, and A. Zenteno, *ApJ*, 832, 95 (2016) 2016ApJ...832...95D *Citations: 251*

9. **Galaxy populations in the 26 most massive galaxy clusters in the South Pole Telescope SPT-SZ survey**, Zenteno, A., J. J. Mohr, S. Desai, B. Stalder, A. Saro, J. P. Dietrich, M. Bayliss, S. Bocquet, **I. Chiu**, A. H. Gonzalez, C. Gangkofner, N. Gupta, J. Hlavacek-Larrondo, M. McDonald, C. Reichardt, and A. Rest, *MNRAS*, 462, 830 (2016) 2016MNRAS.462..830Z *Citations: 34*
8. **Detection of the kinematic Sunyaev-Zel'dovich effect with DES Year 1 and SPT**, Soergel, B., S. Flender, K. T. Story, L. Bleem, T. Giannantonio, G. Efstathiou, E. Rykoff, B. A. Benson, T. Crawford, S. Dodelson, S. Habib, K. Heitmann, G. Holder, B. Jain, E. Rozo, A. Saro, J. Weller, F. B. Abdalla, S. Allam, J. Annis, R. Armstrong, A. Benoit-Lévy, G. M. Bernstein, J. E. Carlstrom, A. Carnero Rosell, M. Carrasco Kind, F. J. Castander, **I. Chiu**, R. Chown, M. Crocce, C. E. Cunha, C. B. D'Andrea, L. N. da Costa, T. de Haan, S. Desai, H. T. Diehl, J. P. Dietrich, P. Doel, J. Estrada, A. E. Evrard, B. Flaugher, P. Fosalba, J. Frieman, E. Gaztanaga, D. Gruen, R. A. Gruendl, W. L. Holzapfel, K. Honscheid, D. J. James, R. Keisler, K. Kuehn, N. Kuropatkin, O. Lahav, M. Lima, J. L. Marshall, M. McDonald, P. Melchior, C. J. Miller, R. Miquel, B. Nord, R. Ogando, Y. Omori, A. A. Plazas, D. Rapetti, C. L. Reichardt, A. K. Romer, A. Roodman, B. R. Saliwanchik, E. Sanchez, M. Schubnell, I. Sevilla-Noarbe, E. Sheldon, R. C. Smith, M. Soares-Santos, F. Sobreira, A. Stark, E. Suchyta, M. E. C. Swanson, G. Tarle, D. Thomas, J. D. Vieira, A. R. Walker, N. Whitehorn, DES Collaboration, and SPT Collaboration, *MNRAS*, 461, 3172 (2016) 2016MNRAS.461.3172S *Citations: 131*
7. **The Evolution of the Intracluster Medium Metallicity in Sunyaev Zel'dovich-selected Galaxy Clusters at $0 < z < 1.5$** , McDonald, M., E. Bulbul, T. de Haan, E. D. Miller, B. A. Benson, L. E. Bleem, M. Brodwin, J. E. Carlstrom, **I. Chiu**, W. R. Forman, J. Hlavacek-Larrondo, G. P. Garmire, N. Gupta, J. J. Mohr, C. L. Reichardt, A. Saro, B. Stalder, A. A. Stark, and J. D. Vieira, *ApJ*, 826, 124 (2016) 2016ApJ...826..124M *Citations: 76*
6. **Constraints on the richness-mass relation and the optical-SZE positional offset distribution for SZE-selected clusters**, Saro, A., S. Bocquet, E. Rozo, B. A. Benson, J. Mohr, E. S. Rykoff, M. Soares-Santos, L. Bleem, S. Dodelson, P. Melchior, F. Sobreira, V. Upadhyay, J. Weller, T. Abbott, F. B. Abdalla, S. Allam, R. Armstrong, M. Banerji, A. H. Bauer, M. Bayliss, A. Benoit-Lévy, G. M. Bernstein, E. Bertin, M. Brodwin, D. Brooks, E. Buckley-Geer, D. L. Burke, J. E. Carlstrom, R. Capasso, D. Capozzi, A. Carnero Rosell, M. Carrasco Kind, **I. Chiu**, R. Covarrubias, T. M. Crawford, M. Crocce, C. B. D'Andrea, L. N. da Costa, D. L. DePoy, S. Desai, T. de Haan, H. T. Diehl, J. P. Dietrich, P. Doel, C. E. Cunha, T. F. Eifler, A. E. Evrard, A. Fausti Neto, E. Fernandez, B. Flaugher, P. Fosalba, J. Frieman, C. Gangkofner, E. Gaztanaga, D. Gerdes, D. Gruen, R. A. Gruendl, N. Gupta, C. Hennig, W. L. Holzapfel, K. Honscheid, B. Jain, D. James, K. Kuehn, N. Kuropatkin, O. Lahav, T. S. Li, H. Lin, M. A. G. Maia, M. March, J. L. Marshall, P. Martini, M. McDonald, C. J. Miller, R. Miquel, B. Nord, R. Ogando, A. A. Plazas, C. L. Reichardt, A. K. Romer, A. Roodman, M. Sako, E. Sanchez, M. Schubnell, I. Sevilla, R. C. Smith, B. Stalder, A. A. Stark, V. Strazzullo, E. Suchyta, M. E. C. Swanson, G. Tarle, J. Thaler, D. Thomas, D. Tucker, V. Vikram, A. von der Linden, A. R. Walker, R. H. Wechsler, W. Wester, A. Zenteno, and K. E. Ziegler, *MNRAS*, 454, 2305 (2015) 2015MNRAS.454.2305S *Citations: 126*
5. **A Measurement of Gravitational Lensing of the Cosmic Microwave Background by Galaxy Clusters Using Data from the South Pole Telescope**, Baxter, E. J., R. Keisler, S. Dodelson, K. A. Aird, S. W. Allen, M. L. N. Ashby, M. Bautz, M. Bayliss, B. A. Benson, L. E. Bleem, S. Bocquet, M. Brodwin, J. E. Carlstrom, C. L. Chang, **I. Chiu**, H.-M. Cho, A. Clocchiatti, T. M. Crawford, A. T. Crites, S. Desai, J. P. Dietrich, T. de Haan, M. A. Dobbs, R. J. Foley, W. R. Forman, E. M. George, M. D. Gladders, A. H. Gonzalez, N. W. Halverson, N. L. Harrington, C. Hennig, H. Hoekstra, G. P. Holder, W. L. Holzapfel, Z. Hou, J. D. Hrubes, C. Jones, L. Knox, A. T. Lee, E. M. Leitch, J. Liu, M. Lueker, D. Luong-Van, A. Mantz, D. P. Marrone, M. McDonald, J. J. McMahon, S. S. Meyer, M. Millea, L. M. Mocanu, S. S. Murray, S. Padin, C. Pryke, C. L. Reichardt, A. Rest, J. E. Ruhl, B. R. Saliwanchik, A. Saro, J. T. Sayre, K. K. Schaffer, E. Shirokoff, J. Song, H. G. Spieler, B. Stalder, S. A. Stanford, Z. Staniszewski, A. A. Stark, K. T. Story, A. van Engelen, K. Vanderlinde, J. D. Vieira, A. Vikhlinin, R. Williamson, O. Zahn, and A. Zenteno, *ApJ*, 806, 247 (2015) 2015ApJ...806..247B *Citations: 84*
4. **Analysis of Sunyaev-Zel'dovich effect mass-observable relations using South Pole Telescope observations of an X-ray selected sample of low-mass galaxy clusters and groups**, Liu, J., J. Mohr, A. Saro, K. A. Aird, M. L. N. Ashby, M. Bautz, M. Bayliss, B. A. Benson, L. E. Bleem, S. Bocquet, M. Brodwin, J. E. Carlstrom, C. L. Chang, **I. Chiu**, H. M. Cho, A. Clocchiatti, T. M. Crawford, A. T. Crites, T. de Haan, S. Desai, J. P. Dietrich, M. A. Dobbs, R. J. Foley, D. Gangkofner, E. M. George,

M. D. Gladders, A. H. Gonzalez, N. W. Halverson, C. Hennig, J. Hlavacek-Larrondo, G. P. Holder, W. L. Holzapfel, J. D. Hrubes, C. Jones, R. Keisler, A. T. Lee, E. M. Leitch, M. Lueker, D. Luong-Van, M. McDonald, J. J. McMahon, S. S. Meyer, L. Mocanu, S. S. Murray, S. Padin, C. Pryke, C. L. Reichardt, A. Rest, J. Ruel, J. E. Ruhl, B. R. Saliwanchik, J. T. Sayre, K. K. Schaffer, E. Shirokoff, H. G. Spieler, B. Stalder, Z. Staniszewski, A. A. Stark, K. Story, R. Šuhada, K. Vanderlinde, J. D. Vieira, A. Vikhlinin, R. Williamson, O. Zahn, and A. Zenteno, *MNRAS*, 448, 2085 (2015) 2015MNRAS.448.2085L *Citations: 22*

3. **Galaxy Clusters Discovered via the Sunyaev-Zel'dovich Effect in the 2500-Square-Degree SPT-SZ Survey,**

Bleem, L. E., B. Stalder, T. de Haan, K. A. Aird, S. W. Allen, D. E. Applegate, M. L. N. Ashby, M. Bautz, M. Bayliss, B. A. Benson, S. Bocquet, M. Brodwin, J. E. Carlstrom, C. L. Chang, **I. Chiu**, H. M. Cho, A. Clocchiatti, T. M. Crawford, A. T. Crites, S. Desai, J. P. Dietrich, M. A. Dobbs, R. J. Foley, W. R. Forman, E. M. George, M. D. Gladders, A. H. Gonzalez, N. W. Halverson, C. Hennig, H. Hoekstra, G. P. Holder, W. L. Holzapfel, J. D. Hrubes, C. Jones, R. Keisler, L. Knox, A. T. Lee, E. M. Leitch, J. Liu, M. Lueker, D. Luong-Van, A. Mantz, D. P. Marrone, M. McDonald, J. J. McMahon, S. S. Meyer, L. Mocanu, J. J. Mohr, S. S. Murray, S. Padin, C. Pryke, C. L. Reichardt, A. Rest, J. Ruel, J. E. Ruhl, B. R. Saliwanchik, A. Saro, J. T. Sayre, K. K. Schaffer, T. Schrabback, E. Shirokoff, J. Song, H. G. Spieler, S. A. Stanford, Z. Staniszewski, A. A. Stark, K. T. Story, C. W. Stubbs, K. Vanderlinde, J. D. Vieira, A. Vikhlinin, R. Williamson, O. Zahn, and A. Zenteno, *ApJS*, 216, 27 (2015) 2015ApJS..216...27B *Citations: 681*

2. **Mass Calibration and Cosmological Analysis of the SPT-SZ Galaxy Cluster Sample Using Velocity Dispersion σ_v and X-Ray Y_X Measurements,**

Bocquet, S., A. Saro, J. J. Mohr, K. A. Aird, M. L. N. Ashby, M. Bautz, M. Bayliss, G. Bazin, B. A. Benson, L. E. Bleem, M. Brodwin, J. E. Carlstrom, C. L. Chang, **I. Chiu**, H. M. Cho, A. Clocchiatti, T. M. Crawford, A. T. Crites, S. Desai, T. de Haan, J. P. Dietrich, M. A. Dobbs, R. J. Foley, W. R. Forman, D. Gangkofner, E. M. George, M. D. Gladders, A. H. Gonzalez, N. W. Halverson, C. Hennig, J. Hlavacek-Larrondo, G. P. Holder, W. L. Holzapfel, J. D. Hrubes, C. Jones, R. Keisler, L. Knox, A. T. Lee, E. M. Leitch, J. Liu, M. Lueker, D. Luong-Van, D. P. Marrone, M. McDonald, J. J. McMahon, S. S. Meyer, L. Mocanu, S. S. Murray, S. Padin, C. Pryke, C. L. Reichardt, A. Rest, J. Ruel, J. E. Ruhl, B. R. Saliwanchik, J. T. Sayre, K. K. Schaffer, E. Shirokoff, H. G. Spieler, B. Stalder, S. A. Stanford, Z. Staniszewski, A. A. Stark, K. Story, C. W. Stubbs, K. Vanderlinde, J. D. Vieira, A. Vikhlinin, R. Williamson, O. Zahn, and A. Zenteno, *ApJ*, 799, 214 (2015) 2015ApJ...799..214B *Citations: 149*

1. **Constraints on the CMB temperature evolution using multiband measurements of the Sunyaev-Zel'dovich effect with the South Pole Telescope,**

Saro, A., J. Liu, J. J. Mohr, K. A. Aird, M. L. N. Ashby, M. Bayliss, B. A. Benson, L. E. Bleem, S. Bocquet, M. Brodwin, J. E. Carlstrom, C. L. Chang, **I. Chiu**, H. M. Cho, A. Clocchiatti, T. M. Crawford, A. T. Crites, T. de Haan, S. Desai, J. P. Dietrich, M. A. Dobbs, K. Dolag, J. P. Dudley, R. J. Foley, D. Gangkofner, E. M. George, M. D. Gladders, A. H. Gonzalez, N. W. Halverson, C. Hennig, J. Hlavacek-Larrondo, W. L. Holzapfel, J. D. Hrubes, C. Jones, R. Keisler, A. T. Lee, E. M. Leitch, M. Lueker, D. Luong-Van, A. Mantz, D. P. Marrone, M. McDonald, J. J. McMahon, J. Mehl, S. S. Meyer, L. Mocanu, T. E. Montroy, S. S. Murray, D. Nurgaliev, S. Padin, A. Patej, C. Pryke, C. L. Reichardt, A. Rest, J. Ruel, J. E. Ruhl, B. R. Saliwanchik, J. T. Sayre, K. K. Schaffer, E. Shirokoff, H. G. Spieler, B. Stalder, Z. Staniszewski, A. A. Stark, K. Story, A. van Engelen, K. Vanderlinde, J. D. Vieira, A. Vikhlinin, R. Williamson, O. Zahn, and A. Zenteno, *MNRAS*, 440, 2610 (2014) 2014MNRAS.440.2610S *Citations: 71*