


I-Non Chiu


邱奕儂


CONTACT INFORMATION


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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

EMPLOYMENT

Assistant Professor 2022/08/01–Present
Physics Department, National Cheng Kung University  Tainan, 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

RESEARCH INTERESTS

Cosmology, Astrophysics, Cosmological Structure Formation, Galaxy Clusters, Gravitational Lensing

LEADERSHIP AND MANAGEMENT ACTIVITIES

Task lead	Weak-Lensing Working Group in the <i>eROSITA</i> collaboration	2020/02/11 – present
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

MEMBERSHIP IN RESEARCH PROJECTS

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

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)	

ACADEMIC SERVICE

Journal referee	Monthly Notices of the Royal Astronomical Society (MNRAS)
Proposal reviewer	The Telescope Access Program (TAP)

MENTORSHIP

Ms. Shu-Ting Li	2018/07/01 – 2019/06/30
» Co-supervision at Graduate Institute of Athletics and Coaching Science, National Taiwan Sport University, Taiwan	
» She won the China Scholarship Council prize to start a Ph.D. program at University of Groningen in 2021.	
Mr. Ronaldo Laishram	2017/07/01 – 2017/08/30

- » Summer Student Program at Academia Sinica Institute of Astronomy and Astrophysics
- » He received the MEXT fellowship for a Master program at Tohoku University in 2019.

Mr. Jhen-Hong Liao

2017/07/01 – 2017/08/30

- » Summer Student Program at Academia Sinica Institute of Astronomy and Astrophysics

PRESS RELEASE AND OUTREACH

Press release of the *eROSITA* Early Data Release (EDR)

2021

Ludwig-Maximilians-Universität

📍 Munich, Germany

- » Astrophysics: An appetizer to the all-sky banquet
- » With Dr. Klaus Dolag, Dr. Matthias Klein, Dr. Sebastian Grandis, and Prof. Joseph Mohr

Scientific article published in a magazine

2019

Issue 92 of Taipei Night Sky

📍 Taipei, Taiwan

- » An Overview of the Hubble Law (in Chinese)

Outreach talk

2017

Taipei Astronomical Museum

📍 Taipei, Taiwan

- » A Brief Talk about Observational Cosmology (in Chinese)

SELECTED PRESENTATIONS

- 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 Oscura 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 February 2022, authored or co-authored 56 refereed or submitted publications, in which I led 10 as the first-author and 1 as a co-lead author. I have total 3300 citations with h -index of 29 (Google Scholar statistics). I am best known for studying galaxy clusters. Some highlights are given as follows.

- Chiu et al., 2022A&A...661A..11C The first weak-lensing mass calibration of *eROSITA*-detected clusters, as well as the most extensive weak-lensing analysis of X-ray selected clusters to date.
- Chiu et al., 2018MNRAS.478.3072C: “The highlight of the most important scientific results from Academia Sinica in 2018”. The first direct constraint of the mass and redshift scaling of baryonic components inside galaxy clusters.
- Chiu et al., 2016MNRAS.455..258C: The first study showing that the baryon content of clusters does not depend on the redshift.
- Bulbul, Chiu, et al., 2019ApJ...871...50B: The backbone of the *eROSITA* cosmology forecast. The most extensive X-ray study of SZ-selected clusters.
- Chiu et al., 2020MNRAS.495..428C and Chiu et al., 2020MNRAS.498.2030C: Two independent mass calibrations of galaxy clusters selected in the HSC survey.

First-author papers

1. **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, 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: 20
2. **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: 9
3. **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: 18
4. **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: 57
5. **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: 23
6. **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: 2
7. **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: 23

8. **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: 26
9. **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: 52
10. **Testing Hydrostatic Equilibrium in Galaxy Cluster MS 2137,**
Chiu, I.-N. T. and S. M. Molnar, ApJ, 756, 1 (2012) 2012ApJ...756....1C Citations: 13

Co-lead papers

1. **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: 57

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

1. **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: 20
2. **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: 26

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.

1. **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, arXiv e-prints, arXiv:2110.09534 (2021) 2021arXiv211009534B Citations: 1
2. **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, arXiv e-prints, arXiv:2109.07836 (2021) 2021arXiv210907836R Citations: 0
3. **Angular clustering and host halo properties of [O II] emitters at $z > 1$ 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: 3
4. **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, arXiv e-prints, arXiv:2106.14519 (2021) 2021arXiv210614519K Citations: 7

5. **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. Oezsoy, M. E. Ramos-Ceja, F. Pacaud, J. Comparat, N. Okabe, Y. E. Bahar, V. Biffi, H. Brunner, M. Brueggen, J. Buchner, J. Ider Chitham, **I. Chiu**, K. Dolag, E. Gatuuzz, 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, arXiv e-prints, arXiv:2106.14518 (2021) 2021arXiv210614518L *Citations: 15*
6. **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: 9*
7. **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: 23*
8. **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: 7*
9. **XXL Survey groups and clusters in the Hyper Suprime-Cam Survey. Scaling relations between X-ray properties and weak lensing mass**,
Sereno, 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: 15*
10. **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: 5*
11. **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: 35*
12. **Cluster Cosmology Constraints from the 2500 deg² SPT-SZ Survey: Inclusion of Weak Gravitational Lensing Data from Magellan and the Hubble Space Telescope**,
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