

# I-DA CHIANG

CASS, University of California, San Diego  
9500 Gilman Dr., La Jolla, CA 92093-0424  
idchiang@ucsd.edu  $\diamond$  <https://idchiang.github.io>

## RESEARCH INTERESTS

---

### Multi-wavelength studies of the interstellar medium in nearby galaxies

I am interested in the relations between dust, metal, and neutral gas in the interstellar medium of spatially resolved galaxies, especially how these relations depend on local physical environments.

### Radio astronomy

As part of my research, I calibrated HI 21 cm line emission data observed by the *Karl G. Jansky* Very Large Array, with  $\sim 170$  hours of total observational time. I am interested in both the science and software development of radio astronomy.

## EDUCATION

---

### University of California, San Diego

*Sep. 2014 - Present*

Ph.D. (Physics)

### National Taiwan University

*Aug. 2012 - Jul. 2014*

M.S. (Physics)

Thesis: “Plasmonic Enhanced Optical Disk Reactor for Wastewater Treatment”

Adviser: Prof. Din Ping Tsai

### National Taiwan University

*Sep. 2007 - Jun. 2011*

B.S. (Physics)

## EMPLOYMENT

---

### Taiwan (R.O.C.) Armed Forces

*Aug. 2011 - Jul. 2012*

Second Lieutenant (Company second-in-command)

## AWARDS

---

Deans Award, College of Science, National Taiwan University

*Jun. 2014*

Deans Award, College of Science, National Taiwan University

*Jun. 2011*

Presidential Award, National Taiwan University

*Mar. 2011*

## REFEREED PUBLICATIONS AS FIRST OR SECOND AUTHOR

---

2) D. Utomo, **I-D. Chiang**, A.K. Leroy, K.M. Sandstrom, J. Chastenet, “The Resolved Distributions of Dust Mass and Temperature in Local Group Galaxies”, 2019, arXiv:1902.08629 (accepted by ApJ)

1) **I-D. Chiang**, K.M. Sandstrom, J. Chastenet, L.C. Johnson, A.K. Leroy, D. Utomo, “The Spatially Resolved Dust-to-metals Ratio in M101”, 2018, ApJ, 865, 2.

## REFEREED PUBLICATIONS AS OTHER COAUTHOR

---

3) J. Chastenet, K.M. Sandstrom, **I-D. Chiang**, A.K. Leroy, D. Utomo, C. Bot, K.D. Gordon, B.T. Draine, Y. Fukui, T. Onishi, K. Tsuge, “Polycyclic Aromatic Hydrocarbon Fraction at  $\sim 10$  pc scale in the Magellanic Clouds”, 2019 (submitted to ApJ)

2) A.K. Leroy, K.M. Sandstrom, D. Lang, A. Lewis, E.A. Behrens, J. Chastenet, **I-D. Chiang**, M.J. Gallagher, D. Utomo, “A  $z = 0$  Multi-wavelength Galaxy Synthesis I: A WISE and GALEX Atlas of Local Galaxies”, 2019 (submitted to ApJ).

1) W.T. Chen, K.-Y. Yang, C.-M. Wang, Y.-W. Huang, G. Sun, **I-D. Chiang**, C.Y. Liao, W.-L. Hsu, H.T. Lin, S. Sun, L. Zhou, A.Q. Liu, D.P. Tsai, “High-Efficiency Broadband Meta-Hologram with Polarization-Controlled Dual Images”, 2014, Nano Lett., 14, 225.

## RESEARCH PRESENTATIONS

---

2019, Contributed talk, Dusting the Universe, Tucson, Arizona, USA

2019, Lunch talk, University of California, San Diego, USA

2018, Tea time talk, University of California, San Diego, USA

2018, Poster, CPHDUST, Copenhagen, Denmark

2018, Poster, ASROC2018, Taipei, Taiwan

2019, Lunch talk, University of California, San Diego, USA

2013, Contributed talk, Frontiers in Optics, Orlando, Florida, USA

2012, Poster, Optics & Photonics Taiwan International Conference, Taipei, Taiwan

## TEACHING EXPERIENCE

---

Lab TA Coordinator, PHYS 1-ABC Lab – University of California, San Diego *Mar. 2015 - Jun. 2016*

Teaching Assistant, PHYS 1-A Lab – University of California, San Diego *Sep. 2014 - Mar. 2015*

## OUTREACH EXPERIENCE

---

STEM in Your Backyard: City Heights – presenter *Jan. 2018*

Tech Trek: University of California, San Diego – presenter *Jul. 2017*