

List of Research Publications & Press Releases (as of 2022 March 11)

Citations and H-Indices from ADS:

First-Author Papers (38) in Refereed Journals/Reviews (H-index=24, Citations=1618)

(including 1 The Astronomy and Astrophysics Review, 2 Nature Astronomy, 1 Nature Communications, 1 Nature Research Highlights, 1 Science Advances, 3 ApJ Letters)

All Papers (104) in Refereed Journals/Reviews (H-index=33, Citations=4404)

First-Author Papers in Refereed Journals/Reviews

38. Magneto-Centrifugal Origin for Protostellar Jets Validated through Detection of Radial Expansion at the Jet Base
Lee, C.-F.*, Li, Z.-Y., Shang, H., & Hirano, N., 2022, **ApJ Letters**, 927, L27 (8pp)
37. What Produces Dust Polarization in the HH 212 Protostellar Disk at 878 m: Dust Self-Scattering or Dichroic Extinction?
Lee, C.-F.*, Li, Z.-Y., Yang, H., Lin, Z.-Y. D., Ching, T.-C., & Lai, S.-P., 2021, **ApJ**, 910, 75 (12pp)
36. First Detection of Interaction between a Magnetic Disk Wind and an Episodic Jet in a Protostellar System
Lee, C.-F.*, Tabone, B., Cabrit, S., Codella, C., Podio, L., Ferreira, J., & Jacquemin-Ide, J. 2021, **ApJ Letters**, 907, 41 (7pp)
35. Molecular Jets From Low-Mass Young Protostellar Objects (**Invited Review**)
Lee, C.-F.*, 2020, **Astronomy and Astrophysics Review**, 28, 1 (35pp)
34. Spiral Structures in an Embedded Protostellar Disk Driven by Envelope Accretion
Lee, C.-F.*, Li, Z.-Y., & Turner, N. J., 2020, **Nature Astronomy**, 142-146
33. A Pseudodisk Threaded with a Toroidal and Pinched Poloidal Magnetic Field Morphology in the HH 211 Protostellar System
Lee, C.-F.*, Kwon, W., Jhan, K.-S., Hirano, N., Hwang, H.-C., Lai, S.-P., Ching, T.-C., Rao, R., & Ho, P. T. P., 2019, **ApJ**, 870, 101 (12pp)
32. First Abundance Measurement of Organic Molecules in the Atmosphere of HH 212 Protostellar Disk
Lee, C.-F.*, Codella C., Li, Z.-Y., & Liu, S.-Y., 2019, **ApJ**, 876, 63 (9pp)
31. Unveiling a magnetized jet from a low-mass protostar
Lee, C.-F.*, Hwang, H.-C., Ching, T.-C., Hirano, N., Lai, S.-P., Rao, R., & Ho, P.T.P., 2018, **Nature Communications**, 9, 4636 (7pp)
30. ALMA observations of the very young Class 0 protostellar system HH 211: a 30-au dusty disk with a disk-wind traced by SO
Lee, C.-F.*, Li, Z.-Y., Zhang, Q., Shang, S., Ho, P.T.P., & Zhang, Q. 2018, **ApJ**, 863, 94 (9pp)

29. A 100 au-wide Bipolar Rotating Shell Emanating From The HH 212 Protostellar Disk: A Disk Wind?
Lee, C.-F.*, Li, Z.-Y., Codella, C., Ho, P.T.P., Podio, L., Hirano, N., Shang, S., & Zhang, Q., 2018, *ApJ*, 856, 14 (13pp)
28. ALMA Dust Polarization Observations of Two Young Edge-on Protostellar Disks
Lee, C.-F.*, Li, Z.-Y., Ching, T.-C., Lai, S.-P., & Yang, H.-F., 2018, *ApJ*, 854, 56 (8pp)
27. A Rotating Protostellar Jet Launched from the Innermost Disk of HH 212
Lee, C.-F.*, Ho, P.T.P., Li, Z.-Y., Hirano, N., Zhang, Q., & Shang, S., **Nature Astronomy**, 2017, 1, 0152 (5pp)
26. Formation and Atmosphere of Complex Organic Molecules of the HH 212 Protostellar Disk
Lee, C.-F.*, Li, Z.-Y., Ho, P.T.P., Hirano, N., Zhang, Q., & Shang, S., 2017, *ApJ*, 843, 27 (14pp) (**Nature Science Highlights**)
25. First Detection of Equatorial Dark Dust Lane in a Protostellar Disk at Submillimeter Wavelength
Lee, C.-F.*, Li, Z.-Y., Ho, P.T.P., Hirano, N., Zhang, Q., & Shang, S., 2017, **Science Advances**, 3, e1602935 (5pp)
24. Angular momentum loss in the envelope-disk transition region of HH 111 protostellar system: evidence for magnetic braking?
Lee, C.-F.*, Hwang, H.-C., & Li, Z.-Y., 2016, *ApJ*, 826, 213 (8pp)
23. Jet Motion, Internal Working Surfaces, and Nested Shells in the Protostellar System HH 212
Lee, C.-F.*, Hirano, N., Zhang, Q., Shang, Q., Ho, P.T.P., & Mizuno, Y., 2015, *ApJ*, 805, 186 (9pp)
22. Magnetic Field Structure in the Envelope and Jet in the Protostellar System HH 211
Lee, C.-F.*, Rao, R., Ching, T.-C., Lai, S.-P., Hirano, N., Ho, P.T.P., & Hwang, H.-C. 2014, **ApJ Letters**, 797, L9 (4pp)
21. ALMA Results of the Pseudodisk, Rotating Disk, and Jet in Continuum and HCO⁺ in the Protostellar System HH 212
Lee, C.-F.*, Hirano, N., Zhang, Q., Shang, H., Ho, P.T.P., Krasnopolsky, R., 2014, *ApJ*, 784, 114 (12pp)
20. Multiple Fast Molecular Outflows in the PPN CRL 618
Lee, C.-F.*, Sahai, R., Sánchez Contreras, C., Huang, P.-S., & Tay, J.J.H., 2013, *ApJ*, 777, 37 (9pp)
19. Mapping the Central Region of the PPN CRL 618 at Sub-arcsecond Resolution at 350 GHz
Lee, C.-F.*, Yang, C.-H., Sahai, R., & Sánchez Contreras, C., 2013, *ApJ*, 770, 153 (17pp)
18. A rotating disk in the HH 111 Protostellar system
Lee, C.-F.*, 2011, *ApJ*, 741, 62 (6pp)
17. A Change of Rotation Profile in the Envelope in the HH 111 Protostellar System: A Transition to a Disk?
Lee, C.-F.*, 2010, *ApJ*, 725, 712-720

16. The Reflection-Symmetric Wiggle of the Young Protostellar Jet HH 211
Lee, C.-F.*, Hasegawa, T.I., Palau, A., Hirano, N., Shang, H., Ho, P.T.P., & Zhang, 2010, ApJ, 713, 731-737
15. Rotation and Outflow Motions in the Very Low-Mass Class 0 Protostellar System HH 211 at Subarcsecond Resolution
Lee, C.-F.*, Hirano, N., Palau, A., Ho, P.T.P., Bourke, T.L., Zhang, Q. & Shang, H., 2009, ApJ, 699, 1584-1594
14. Collimated fast wind in the Pre-Planetary Nebula CRL 618
Lee, C.-F.*, Hsu, M.-C., & Sahai, R., 2009, ApJ, 696, 1630-1639
13. Infall and rotation motions in the HH 111 protostellar system: A flattened envelope in transition to a disk?
Lee, C.-F.*, Mao, Y.-Y., & Reipurth, B., 2009, ApJ, 694, 1395-1401
12. SiO shocks of the protostellar jet HH 212: A search for jet rotation
Lee, C.-F.*, Ho, P.T.P., Bourke, T.L., Hirano, N., Shang, H., & Zhang, Q. 2008, ApJ, 685, 1026-2032
11. Submillimeter Arcsecond-Resolution Mapping of the Highly Collimated Protostellar Jet HH 211
Lee, C.-F.*, Ho, P.T.P., Palau, A., Hirano, N., Bourke, T.L., Shang, H., & Zhang, Q. 2007, ApJ, 670, 1188-1197
10. HH 212: SMA observations of a remarkable protostellar jet
Lee, C.-F.*, Ho, P.T.P., Hirano, N., Beuther, H., Bourke, T.L., Shang, H., & Zhang, Q. 2007, ApJ, 659, 499-511
9. Infall and Outflow around the HH 212 protostellar system
Lee, C.-F.*, Ho, P.T.P., Beuther, H., Bourke, T.L., Zhang, Q., Hirano, N., & Shang, H. 2006, ApJ, 639, 292-302
8. Outflow and Infall in a Star-Forming Region L 1221
Lee, C.-F.* & Ho, P.T.P., 2005, ApJ, 632, 964-972
7. Outflow Interaction in the Late Stages of Star Formation
Lee, C.-F.* & Ho, P.T.P., 2005, ApJ, 624, 841-852
6. Molecular Line Observations of IRAM 04191+1522
Lee, C.-F.*, Ho, P.T.P., & White, S.M, 2005, ApJ, 619, 948-958
5. Magnetohydrodynamic Models of the Bipolar Knotty Jet in Henize 2-90
Lee, C.-F.* & Sahai, R., 2004, ApJ, 606, 483-496
4. Shaping Proto-Planetary and Young Planetary Nebulae with Collimated Fast Winds
Lee, C.-F.* & Sahai, R., 2003, ApJ, 586, 319-337
3. CO Outflows from Young Stellar Objects
Lee, C.-F., Mundy, L.G., Stone, J.M. & Ostriker, E.C., 2002, ApJ, 576, 294-312
2. Hydrodynamic Simulations of Jet- and Wind-driven Protostellar Outflows
Lee, C.-F., Stone, J.M., Ostriker, E.C., & Mundy, L.G. 2001, ApJ, 557, 429-442

1. CO Outflows from Young Stars: Confronting the Jet and Wind Models
Lee, C.-F., Mundy, L.G., Reipurth, B., Ostriker, E.C., & Stone, J.M. 2000, ApJ, 542, 925-945

Non-First-Author Review Chapters or Papers

2. The HH 212 Interstellar Laboratory: Astrochemistry as a Tool To Reveal Protostellar Disks on Solar System Scales around a Rising Sun (**Invited Review**)
Codella, C., Ceccarelli, C., **Lee, C.-F.**, Bianchi, E., Balucani, N., Podio, L., Cabrit, S., et. al 2019, ACS Earth and Space Chemistry, 3(10), 2110-2121
1. Molecular outflows in low- and high-mass star forming regions
Arce, H.G., Shepherd, D., Gueth, F., **Lee, C.-F.**, Bachiller, R., Rosen, A., & Beuther, H., 2007, Protostars and Planets V, 245-260

Press Releases

12. Discovery of Interaction between Jet and Disk Wind from a Star-Forming Accretion Disk (**ALMA-East Asia Press**)
Lee, C.-F., Tabone, B., Cabrit, S., Codella, C., Podio, L., Ferreira, J., & Jacquemin-Ide, J. 2021, **ApJ Letters**, 907, 41 (7pp)
11. Feeding a Baby Star Through a Whirlpool in Space (**ALMA Press**)
Lee, C.-F., Li, Z.-Y., & Turner, N. J., 2019, **Nature Astronomy**, 466
10. Beer On Space Hamburger around a Baby Star
Lee, C.-F., Codella, C., Li, Z.-Y., Liu, S.-Y., ApJ, 2019, 876, 63
9. Magnetic Field found in a Jet from a Baby Star (**ALMA Press**)
Lee, C.-F., Hwang, H.-C., Ching, T.-C., Hirano, N., Lai, S.-P., Rao, R., & Ho, P.T.P., **Nature Comm**, 2018, 9, 4636
8. Youngest Accretion Disk Detected in Star Formation: In Support of an Early-Start, Slow-Growth Scenario for Accretion Disk Formation
Lee, C.-F., Li, Z.-Y., Zhang, Q., Shang, S., Ho, P.T.P., & Zhang, Q. 2018, ApJ, 863, 94
7. Organic molecules spotted in star-forming disk (**Nature Research Highlight**)
Space Hamburger with Complex Organic Molecules **ALMA-East Asia Press**
Lee, C.-F., Li, Zhi-Yun, P.T.P., Hirano, N., Zhang, Q., Shang, H., 2017, ApJ
6. Baby star spits a “spinning jet” as it munches down on a “space hamburger” (**ALMA Press**)
Lee, C.-F., Ho, P.T.P., Li, Zhi-Yun, Hirano, N., Zhang, Q., Shang, H., 2017, **Nature Astronomy**
5. The onset of an extra-solar system feeding a baby star with a dusty hamburger (**ALMA Press**)
Lee, C.-F., Li, Zhi-Yun, Ho, P.T.P., Hirano, N., Zhang, Q., Shang, H., 2017, **Science Advance**
4. Best ALMA Image Ever Reveals a Planet Nursery around a Young Star
ALMA Team, 2014-11-07
3. Taiwan Astronomers Begin ALMA Early Science Projects
ALMA Team, 2011-10-25

2. Brown dwarfs do form like stars (**CfA Press**)
Phan-Bao, N., Riaz, B., **Lee, C.-F.**, Tang, Y.-W., Ho, P.T.P., Martin, E. L., Lim, J., Ohashi, N., Shang, H., 2008-12-15
1. Jets Are A Real Drag: Matter Jetting From Young Star Spirals Out in “Reverse Whirlpool” (**CfA Press**)
Lee, C.-F., Ho, P.T.P., Palau, A., Hirano, N., Bourke, T.L., Shang, H., & Zhang, Q. 2007-12-24

Students’ Papers in Refereed Journals

8. ALMA Survey of Orion Planck Galactic Cold Clumps (ALMASOP): Deriving Inclination Angle and Velocity of the Protostellar Jets from their SiO Knots
Jhan, K.-S., **Lee, C.-F.**, & ALMASOP Team, 2022, **ApJ Letters**, submitted
7. 25 AU Angular Resolution Observations of HH 211 with ALMA : Jet Properties and Shock Structures in SiO, CO, and SO
Jhan, K.-S. & **Lee, C.-F.** 2021, ApJ, 909, 11 (17pp)
6. Inferring (sub)millimetre dust opacities and temperature structure in edge-on protostellar discs from resolved multiwavelength continuum observations: the case of the HH 212 disc
Lin, Z.-Y. D., **Lee, C.-F.**, Li, Z.-Y., Tobin, J. J., & Turner, N. J., MNRAS, 2021, 501, 1316-1335
5. Evolution from Spherical AGB Wind to Multipolar Outflow in Pre-Planetary Nebula IRAS 17150-3224
Huang, P.-S., **Lee, C.-F.**, & Sahai, R., 2020, ApJ, 889, 85 (14pp)
4. The Shaping of Multipolar Pre-Planetary Nebulae by Multi-directional Bullets
Huang, P.-S., **Lee, C.-F.**, Moraghan, A., & Smith M., 2016, ApJ, 820, 134 (8pp)
3. A Multi-Epoch SMA Study of the HH211 Protostellar Jet: Jet Motion and Knot Formation
Jhan, K.-S. & **Lee, C.-F.** 2016, ApJ, 816, 32 (7pp)
2. Remodel the expanding envelope around the Pre-Planetary Nebula IRAS 07134+1005
Yang, C.-H. & **Lee, C.-F.** 2012, ApJ, 744, 117 (8pp)
1. An Envelope Disrupted by a Quadrupolar Outflow in the Pre-Planetary Nebula IRAS19475+3119
Hsu, M.-C. & **Lee, C.-F.** 2011, ApJ, 736, 30 (9pp)

Postdocs’ Papers in Refereed Journals

4. ALMA Survey of Orion Planck Galactic Cold Clumps (ALMASOP): Molecular Jet Launched at an Unprecedented Early Phase of Protostellar evolution
Dutta, S., **Lee, C.-F.**, et al., 2022, ApJ, *resubmitted*.
3. Detection of a dense SiO jet in the evolved protostellar phase
Dutta, S., **Lee, C.-F.**, Johnstone, D, et al., ApJ, 2022, 925, 11 (10pp)
2. ALMA Survey of Orion Planck Galactic Cold Clumps (ALMASOP). II. Survey Overview: A First Look at 1.3 mm Continuum Maps and Molecular Outflows
Dutta, S., **Lee, C.-F.**, Liu, T., .. et al., ApJS, 2020, 251, 20 (35pp)

1. A study of the wiggle morphology of HH 211 through numerical simulations
Moraghan, A., **Lee, C.-F.**, Huang, P.-S., & Vaidya, B., MNRAS, 2016, 460, 1829-1838

Non First-Author Papers in Refereed Journals

52. B-fields in Star-Forming Region Observations (BISTRO): Magnetic Fields in the Filamentary Structures of Serpens Main.
Kwon, W., ..., **Lee, C.-F.**, ..., ApJ, 2022 in press
51. ALMA Survey of Orion Planck Galactic Cold Clumps (ALMASOP): A Hot Corino Survey toward Protostellar Cores in the Orion Cloud.
Hsu, S.-Y., ..., **Lee, C.-F.**, ..., ApJ, 2022 in press
50. Accretion Flows or Outflow Cavities? Uncovering the Gas Dynamics around Lupus 3-MMS
Thieme, T. J., ..., **Lee, C.-F.**, ..., ApJ, 2022 in press
49. The JCMT Transient Survey: Four-year Summary of Monitoring the Submillimeter Variability of Protostars
Lee, Y.-H., Johnstone, D., Lee, J.-E., ..., **Lee, C.-F.**, .. et al., ApJ, 2021, 920, 119 (23pp)
48. Planck Galactic Cold Clumps at High Galactic Latitude-a Study with CO Lines
Xu, F., Wu, Y., Liu, T., .. **Lee, C.-F.**, .. et al., ApJ, 2021, 920, 103 (29pp)
47. The JCMT BISTRO Survey: An 850/450 μm Polarization Study of NGC 2071IR in Orion B.
Lyo, A.-R., Kim, J., Sadavoy, S., .. **Lee, C.-F.**, ..., et al., ApJ, 2021, 918, 85 (17pp)
46. The JCMT BISTRO Survey: Revealing the Diverse Magnetic Field Morphologies in Taurus Dense Cores with Sensitive Submillimeter Polarimetry
Eswaraiah, C., Li, D., Furuya, R. S., .. **Lee, C.-F.**, .. et al., **ApJ Letters**, 2021, 91, L27 (15pp)
45. Dust polarized emission observations of NGC 6334. BISTRO reveals the details of the complex but organized magnetic field structure of the high-mass star-forming hub-filament network
Arzoumanian, D.; Furuya, R. S.; Hasegawa, T., ... **Lee, C.-F.**, .. et al., A&A, 2021, 647, 78 (29pp)
44. Observations of Magnetic Fields Surrounding LkH 101 Taken by the BISTRO Survey with JCMT-POL-2
Ngoc, N. B., Diep, P. N., ... **Lee, C.-F.**, .. et al., ApJ, 2021, 908, 10 (20pp)
43. ALMA Survey of Orion Planck Galactic Cold Clumps (ALMASOP): Detection of Extremely High-density Compact Structure of Prestellar Cores and Multiple Substructures Within
Sahu, D., Liu, S.-Y., Liu, T., ... **Lee, C.-F.**, .. et al., **ApJ Letters**, 2021, 907, 15 (9pp)
42. The JCMT BISTRO Survey: Alignment between Outflows and Magnetic Fields in Dense Cores/Clumps
Yen, H.-W., Koch, P. M., Hull, C. L. H., ... **Lee, C.-F.**, .. et al., ApJ, 2021, 907, 33 (21pp)
41. The JCMT BISTRO Survey: Magnetic Fields Associated with a Network of Filaments in NGC 1333
Doi, Y., Hasegawa, T., Furuya, R. S., ... **Lee, C.-F.** .. et al., ApJ, 2020, 899, 28 (23pp)

40. ALMA Survey of Orion Planck Galactic Cold Clumps (ALMASOP): I. Detection of New Hot Corinos with ACA
Hsu, S.-Y., Liu, S.-Y., Liu, T., Sahu, D., Hirano, N., **Lee, C.-F.**, .. et al. ApJ, 2020, 898, 107 (36pp)
39. Probing the temperature structure of optically thick discs using polarized emission of aligned grains
Lin, Z.-Y. D., Li, Z.-Y., Yang, H., Looney, L., **Lee, C.-F.**, Stephens, I, Lai, S.-P., MNRAS, 2020, 493, 4868-4883
38. The Infall Motion in the Low-mass Protostellar Binary NGC 1333 IRAS 4A1/4A2
Su Y-N, Liu S-Y, Li Z-Y, **Lee, C.-F.**, Hirano N, Takakuwa S, & Hsieh I-T, 2019, ApJ, 885, 98 (16pp)
37. HL Tau Disk in HCO+ (3-2) and (1-0) with ALMA: Gas Density, Temperature, Gap, and One-arm Spiral
Yen H-W, Gu P-G, Hirano N, Koch PM, **Lee, C.-F.**, Liu HB, Takakuwa S, 2019, ApJ, 880(2), 69 (18 pp.)
36. SCOPE: SCUBA-2 Continuum Observations of Pre-protostellar Evolution - survey description and compact source catalogue
Eden, D. J., Liu, T., Kim, K.-T., ..., **Lee, C.-F.**, ..., 2019, MNRAS, 485, 2895-2908
35. The JCMT BISTRO Survey: The Magnetic Field in the Starless Core Ophiuchus C
Liu JH, Qiu KP, Berry D, ..., **Lee, C.-F.**, ... et al., 2019, ApJ, 877(1), 43 (17 pp.)
34. JCMT BISTRO Survey: Magnetic Fields within the Hub-filament Structure in IC 5146
Wang, J.-W., Lai, S.-P., Eswaraiah, C., ..., **Lee, C.-F.**, ..., ApJ, 2019, 876, 42 (19pp)
33. Signs of outflow feedback from a nearby young stellar object on the protostellar envelope around HL Tauri
Yen, H.-W., Takakuwa, S., Gu, P.-G., Hirano, N, **Lee, C.-F.**, .. etc, 2019, A&A, 623, 96 (20pp)
32. Implication of a hot atmosphere/corino from ALMA observations towards NGC1333 IRAS 4A1
Sahu, D., Liu, S.-Y., Su, Y.-N., Li, Z.-Y., **Lee, C.-F.**, Hirano, N., & Takakuwa, S., 2019, ApJ, 872, 196 (14pp)
31. JCMT POL-2 and ALMA polarimetric observations of 6000100 au scales in the protostar B335: linking magnetic field and gas kinematics in observations and MHD simulations
Yen, H.-W., Zhao, B., Hsieh, I.-T., ..., **Lee, C.-F.**, .. et al, 2019, ApJ, 871, 243 (18pp)
30. ALMA observations of the protostellar disk around the VeLLO IRAS 16253–2429
Hsieh, T.-H., Hirano, N., Belloche, A., **Lee, C.-F.**, Aso, Y., & Lai, S.-P., 2019, ApJ, 871, 100 (11pp)
29. ALMA reveals a collision between protostellar outflows in BHR71
Zapata, L. A., Fernandez-Lopez, M., Rodriguez, L. F., Garay, G., Takahashi, S., **Lee, C.-F.**, & Hernandez Gomez, A., 2018, AJ, 156, 239 (7pp)
28. Water and interstellar complex organics associated with the HH 212 protostellar disk On disk atmospheres, disk winds, and accretion shocks
Codella, C., Bianchi, E., Tabone, B., **Lee, C.-F.**, Cabrit, C., et al., 2018, A&A, 617, A10 (9pp)

27. Deuterated Formaldehyde in the low mass protostar HH 212
Sahu, D., Minh, Y.C, **Lee, C.-F.**, Liu, S.-Y., Das, Ankan, Chakrabarti, S.K., & Sivaraman B. 2018, MNRAS, 475, 5322-5329
26. The TOP-SCOPE Survey of Planck Galactic Cold Clumps: Survey Overview and Results of an Exemplar Source, PGCC G26.53+0.17
Liu, T., Kim, K.-T., Juvela, M., Wang, K., **Lee, C.-F.**, ... 2018, ApJS, 234, 28 (31pp)
25. A Molecular-line study of the Interstellar Bullet Engine IRAS 05506+2414
Sahai, R., **Lee, C.-F.**, Sanchez-Contreras, C, Patel, N., Morris, M., Claussen, M., 2017, ApJ, 850, 158 (18pp)
24. 1000 au exterior arcs connecting the protoplanetary disk around HL Tauri
Yen, H.-W., Takakuwa, S, Chu, Y.-H., Hirano, N., Ho, T.P.T., Kanagawa, K., **Lee, C.-F.**, Liu, H. B., Liu, S.-Y., Wu, C.-J. 2017, A&A, 608, 134 (18pp)
23. How do stars gain their mass? A JCMT/Scuba-2 transient survey of protostars in nearby star forming regions
Herczeg, G.J., Johnstone, D.I., Mairs, S.,...**Lee, C.-F.**,....., 2017, ApJ, 849, 43 (14pp)
22. Detection of lithium in nearby young late-M dwarfs
Phan-Bao, N., Bessell, M. S., Nguyen-Thanh, D., Martn, E. L., Ho, P. T. P., **Lee, C.-F.** & Parsons, H., A&A, 2017, 600, 19 (9pp)
21. Anatomy of the internal bow shocks in the IRAS 04166+2706 protostellar jet
Tafalla, M., Su, Y.-N., Shang, H., Johnstone, D., Zhang, Q., Santiago-Garca, J., **Lee, C.-F.** , Hirano, N., Wang, L.-Y, A&A, 2017, 597, 119 (12pp)
20. Stacking Spectra in Protoplanetary Disks: Detecting Intensity Profiles from Hidden Molecular Lines in HD 163296
Yen, H.-W., Koch, P.M., Liu, H. B., Puspitaningrum, E., Hirano, N., **Lee, C.-F.**, & Takakuwa, S., 2016, 832, 204 (9pp)
19. Gas Gaps in the Protoplanetary Disk around the Young Protostar HL Tau
Yen, H.-W., Liu, H.B., Gu, P.-G., Hirano, N., **Lee, C.-F.**, Puspitaningrum, E., & Takakuwa, S., **ApJ Letters**, 2016, 820, 25 (7pp)
18. The Inner Debris Structure in the Fomalhaut Planetary System
Su, K. Y. L., Rieke, G. H., Defre, D., Wang, K.-S., Lai, S.-P., Wilner, David J., van Lieshout, R., **Lee, C.-F.**, 2016, ApJ, 818, 45 (11pp)
17. Numerical Simulations of HH 211: a Reflection-Symmetric Bipolar Outflow
Moraghan, A., **Lee, C.-F.**, Huang, P.-S., & Vaidya, B., Publication of Korean Astronomical Society, 2015, 30, 113-114
16. Molecular Outflows and the Formation Process of Very Low-Mass Objects
Phan-Bao, N., Dang-Duc, C., **Lee, C.-F.**, Ho, Paul T. P., PKAS, 2015, 30, 83-86
15. The jet and the disk of the HH 212 low-mass protostar imaged by ALMA: SO and SO₂ emission
Podio, L., Codella, C., Gueth, F., Cabrit, S, Bachiller, R., Gusdorf, A., **Lee, C.-F.**, Lefloch, B, Leurini, S, Nisini, B, and Tafalla, M, 2015, A&A, 2015, 581, 85 (13pp)

14. First results from high angular resolution ALMA observations toward the HL Tau Region
ALMA Partnership, Brogan, C.L., ..., **Lee, C.-F.**, ..., **ApJ Letters**, 2015, 808, L3 (10pp)
13. Characterization of Molecular Outflows in The Substellar Domain
Phan-Bao, N., **Lee, C.-F.**, Ho, P.T.P., Dang-Duc, C. & Li, D. *ApJ*, 2014, 795, 70 (7pp)
12. SMA observations of the proto brown dwarf candidate SSTB213 J041757
Phan-Bao, N., **Lee, C.-F.**, Ho, & P.T.P., *A&A*, 2014, 564, 32 (7pp)
11. Molecular Jet of IRAS 04166+2706
Wang, L.-Y., Shang, H., Su, Y.-N., Santiago-García, J., Tafalla, M., Zhang, Q., Hirano, N., & **Lee, C.-F.**, *ApJ*, 2014, 780, 49 (14pp)
10. SMA Observations of Class 0 Protostars: A High-Angular Resolution Survey of Protostellar Binary Systems
Chen, X., Arce, H.G., Zhang, Q., Bourke, T. L., Launhardt, R., Jorgensen, J.K., **Lee, C.-F.**, Foster, J.B. et al. *ApJ*, 2013, 768, 110 (31pp)
9. Molecular Outflows in the Substellar Domain: Millimeter Observations of Young Very Low Mass Objects in Taurus and ρ Ophiuchi
Phan-Bao, N., **Lee, C.-F.**, Ho, P.T.P., & Tang, Y.-W., *ApJ*, 2011, 735, 14 (5pp)
8. Extreme active molecular jets in L1448C
Hirano, N., Ho, P.T.P., Liu, S.-Y., Shang, H., **Lee, C.-F.**, & Bourke, T.L., 2010, *ApJ*, 717, 58-73
7. First Confirmed Detection of a Bipolar Molecular Outflow from a Young Brown Dwarf
Phan-Bao, N., Riaz, B., **Lee, C.-F.**, Tang, Y.-W., Ho, P.T.P., Martin, E. L., Lim, J., Ohashi, N., Shang, H., 2008, *ApJL*, 689, L141-L144
6. CO molecular outflows of IRAS 16293-2422 Probed by the SMA
Yeh, S.C.C., Hirano, N., Bourke, T.L., Ho, P.T.P., **Lee, C.-F.**, Ohashi, N., & Takakuwa, S., 2008, *ApJ*, 675, 454-463
5. PROSAC: Protostellar Submillimeter Array Campaign I. Overview of program, observations and data.
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2. Deep Impact: Observations from a Worldwide Earth-Based Campaign
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- CO Outflows from Young Stars: Observations and Simulations
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- Morphology of A Young Stellar Object IRAS 16293-2422
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- A Model for Multiwavelength Spectra of Seyfert 1 AGNs
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Student's Theses

7. Formation Mechanism of Multipolar Pre-planetary Nebulae (PPNs): Observations and Simulations
Po-Sheng Huang, 2020, PhD. Thesis, Astronomy, National Taiwan University
6. The Role of Outflow in the Early Phase of Star Formation
Baole Lim, 2017, Honour Degree Thesis, Physics, National University of Singapore
5. A multi-epoch SMA study of the HH 211 protostellar jet: Jet motion and knot formation
Nick Kai-Syun Jhan, 2016, Master Thesis, Astronomy, National Taiwan University
4. Gas Motion Around the Protostar NGC 1333 IRAS 4A2
Huang, Hung-Jin, 2014, Master Thesis, Astronomy, National Taiwan University
3. Torus and Outflow in Proto-Planetary Nebula IRAS 17150-3224
Chen, Tzu-Ying, 2014, Master Thesis, Astronomy, National Normal Taiwan University
2. Dynamics and Thermal Evolution of Superwinds in Pre-Planetary Nebulae
Huang, Po-Sheng, 2011, Master Thesis, Astronomy, National Taiwan University
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Yang, Chun-Hui, 2010 Master's Thesis, Physics, National Normal Taiwan University

Conference Proceedings and Abstracts

43. Probing The Early Processes of Star Formation With ALMA (**Invited Talk**)
Lee, C.-F., 2022 Annual Meeting of the Physical Society of Taiwan, January 24-26 2022, Taipei, Taiwan
42. Polarized SiO observations toward HH211 (**Invited Talk**)
Lee, C.-F., The magnetic field awakens, A new era for star formation 1st-4th December 2020, Paris, France (Online)
41. ALMA View of Star and Planet Formation (**Invited Talk**, cancelled due to COVID-19 outbreak)
Lee, C.-F., Global Malaysian Astronomers Convention, 2020, March 23-25, Kuala Lumpur, Malaysia
40. Molecular jets and winds from low-mass protostellar objects and their connections with disks (**Invited Key Speaker**, cancelled due of COVID-19 outbreak)
Lee, C.-F., From Collapsing Cores to Forming Disks, 2020, March 10-13, Charlottesville, Virginia, US

39. Magnetic field Morphology in two Protostellar disks, a Pseudodisk, and a Protostellar jet (**Invited Talk**) **Lee, C.-F.**, Magnetic Fields in the Universe 7, 2020, Feb 16-22, Quy Nhon, Vietnam
38. Unveiling A Magnetized Jet From a Low-Mass Protostar (**Invited Talk** but cancelled due to sudden change of schedule)
Lee, C.-F., The 14th Asia-Pacific Physics Conference 2019 (APPC-14), Nov 11, Kuching, Malaysia
37. ALMA Dust Polarization Observations of Nearly Edge-On Protostellar disks
Lee, C.-F., ASROC, 2018, May 18-20, Kinmen, Taiwan, R.O.C.
36. ALMA Dust Polarization Observations of Nearly Edge-On Protostellar disks
Lee, C.-F., Magnetic Fields or Turbulence: Which is the critical factor for the formation of stars and planetary disks? 2018, February 6-9, National Tsing Hua University, Hsinchu, Taiwan
35. Spotting a Hungry Baby Star Eating a Space Hamburger and Spitting Spinning Bullets (**Invited Talk**)
Lee, C.-F., PSROC, 2018, Jan 24-26, National Taiwan University, Taipei, Taiwan
34. Hungry baby star eating a space hamburger and spitting spinning bullets
Lee, C.-F., The origin of galaxies, stars, and planets in the era of ALMA, 2017, November 29-Dec 1, Pasadena, California
33. Hungry baby star eating a space hamburger and spitting spinning bullets (**Invited Talk**)
Lee, C.-F., East Asia ALMA Science Workshop 2017, November 26-29, Daejeon, Korea
32. A Keplerian rotating accretion disk and a spinning jet in the HH 212 protostellar system
Lee, C.-F., Francesco's Legacy: Star Formation in Space and Time, June 5-9, 2017, Istitute degli Innocenti, Firenze, Italy
31. Disk Formation in the Early Phase of Star Formation
Lee, C.-F., East-Asian ALMA Science Workshop 2016-Taiwan, March 10-12, 2017, National Tsing Hua University, Hsinchu, Taiwan
30. Disk Formation in the Early Phase of Star Formation
Lee, C.-F., The 10th East Asian Meeting On Astronomy, 2016, Sept 26-30, Seoul National University, Seoul, Korea (**Invited talk**)
29. Explosive Events in the Multipolar Preplanetary Nebule CRL 618
Lee, C.-F., 2015, 11th Pacific Rim Conference on Stellar Astrophysics, December 14-17, 2015, Hong Kong
28. ALMA Results of Protostellar Jets and Outflows
Lee, C.-F., 2015, East Asian ALMA Science Workshop, December 8-11, 2015, Osaka, Japan (**Invited talk**)
27. ALMA View of the Early Phase of Star Formation: Disk and Jet Formation
Lee, C.-F., 2015, 7th Southeast Asian Astronomy Network (SEAAN) Meeting, November 30-December 1, 2015, Krabi, Thailand
26. Magnetic Field Structure in the Very Young Protostellar System HH 211
Lee, C.-F., 2015, Star Formation Workshop 2015, June 29-July 1st, 2015, Tokyo, Japan (**Invited Talk**)

25. Explosive Events in the Multipolar Preplanetary Nebula CRL 618
Lee, C.-F., 2015, Physics of Evolved Stars 2015, June 8-12, Nice, France
24. ALMA Results of the Pseudodisk, Rotating Disk, and Jet in the Very Young Protostellar System HH 212
Lee, C.-F., 2014, Revolution in Astronomy with ALMA - The 3rd year, December 8-11, 2014, Tokyo, Japan
23. ALMA Results of the Pseudodisk, Rotating Disk, and Jet in the Very Young Protostellar System HH 212
Lee, C.-F., 2014, 12th Asia-Pacific Regional IAU Meeting, August 18-22, 2014, Daejeon, Korea
22. A Rapid Change in Multipolar Pre-Planetary Nebula (PPN) CRL 618
Lee, C.-F., 2013, 5th Southeast Asia Astronomy Network Meeting, 17-18 December, 2013, Banting, Malaysia
21. Formation of a Keplerian Disk in the Protostellar System HH 111
Lee, C.-F., 2013, Transformational Science with ALMA: From Dust to Rocks to Planets Formation and Evolution of Planetary Systems, 8-12 April 2013, Kona, US
20. Observations of Young Protostellar Jets: Searching for Jet rotation (**Invited talk**)
Lee, C.-F., 2012, NRAO-NAASC 2012 Workshop: Outflow, Winds and Jets: From Young Stars to Supermassive Black Holes in March 2012 in Charlottesville, US
19. High-resolution observations of Protostellar Jets: A search for Jet Rotation (**Invited talk**)
Lee, C.-F., 2011, The 7th Joint Meeting of Chinese Physicists Worldwide International Conference on Physics Education and Frontier Physics, Kaohsiung, Taiwan
18. SMA observations of Protostellar Jets: A search for jet rotation
Lee, C.-F., 2011, 11th Asian-Pacific Regional IAU Meeting (APRIM), ChiangMai, Thailand
17. SMA and CARMA observations of young brown dwarfs in ρ Ophiuchi and Taurus
Phan-Bao, N., **Lee, C.-F.**, & Ho, P.T.P., 2009, New Technologies for Probing the Diversity of Brown Dwarfs and Exoplanets, Shanghai, China.
16. SMA observations of protostellar jets (**Invited talk**)
Lee, C.-F., Ho, P.T.P, Hirano, N., & Palau, A., et al., 2009, Millimeter and Submillimeter Astronomy at High Angular Resolution
15. Collimated fast wind in Pre-Planetary nebula CRL 618
Lee, C.-F., Hsu, M.-C., & Sahai, R. 2009, Millimeter and Submillimeter Astronomy at High Angular Resolution
14. High velocity SiO emission in the protostellar jets imaged with the Submillimeter Array
Hirano, N., **Lee, C.-F.**, Liu, S.-Y., & Shang, H., 2006, Science with ALMA: a new era for Astrophysics, submitted
13. Protostellar outflows imaged with the Submillimeter Array
Hirano, N., **Lee, C.-F.**, & the SMA team, 2006, Science with ALMA: a new era for Astrophysics, submitted

12. Probing the Inner 200 AU of Low-Mass Protostars with the Submillimeter Array
Jorgensen, J. K. and Bourke, T. L. and Di Francesco, J. and **Lee, C.-F.** and Myers, P. C. and Ohashi, N. and Schoeier, F. L. and Takakuwa, S. and van Dishoeck, E. F. and Wilner, D. J. and Zhang, Q. 2005, American Astronomical Society Meeting, 207, 1474
11. SMA observations of HH 212
Lee, C.-F., 2005, Submillimeter Astronomy in the era of the SMA
10. Observational and Theoretical Studies of Pre-Planetary Nebulae
Dwarkadas, V. V., Sahai, R., York, D. G., Thorburn, J., & **Lee, C.-F.** 2005, American Astronomical Society Meeting, 207, 1161
9. Magneto-Hydrodynamical Models of the Knotty, Collimated Jet in Hen 2-90
Lee, C.-F. & Sahai, R. 2004, ASP Conf. Ser. 313: Asymmetrical Planetary Nebulae III: Winds, Structure and the Thunderbird, 465
8. Jets in YSOs and PPNs/PNs (**Invited talk**)
Lee, C.-F. & Sahai, R. 2004, ASP Conf. Ser. 313: Asymmetrical Planetary Nebulae III: Winds, Structure and the Thunderbird, 438
7. Outflows from Young Stellar Objects and Post Asymptotic Giant Branch Stars
Lee, C.-F., Sahai, R., & Mundy, L.G, 2003, Revista Mexicana de Astronomia y Astrofisica (Conference Series), 15, 139
6. Investigating the HH 212 Molecular Outflow: the Jet- and Wind-Driven Models
Chapman, N. L., Mundy, L.G, **Lee, C.-F.**, & White, S.M., 2002, American Astronomical Society Meeting, 201, 2001
5. CO Outflows from Young Stars
Lee, C.-F., Mundy, L.G, Stone, J.M., & Ostriker, E.C., 2001, American Astronomical Society Meeting, 199, 6007
4. Hydrodynamical Simulations of Jet- and Wind-driven Protostellar Outflows
Lee, C.-F., Stone, J.M., Ostriker, E.C., & Mundy, L.G. 2000, American Astronomical Society Meeting, 197, 2901
3. Simulations of CO Molecular Outflows
Lee, C.-F., Stone, J.M., Ostriker, E.C., & Mundy, L.G. 2000, American Astronomical Society Meeting, 196, 5707
2. Imaging and Simulations of CO Molecular Outflows
Lee, C.-F., Mundy, L.G., Stone, J.M., & Ostriker, E.C. 1999, American Astronomical Society Meeting, 195, 4904
1. Imaging and Simulations of CO Molecular Outflows
Lee, C.-F., Mundy, L.G., Stone, J.M., & Ostriker, E.C. 1999, Science with the Atacama Large Millimeter Array (ALMA), Associated Universities, Inc., held October 6-8, 1999 at Carnegie Institution of Washington, E31