

List of Publications: Full List (updated: June 9, 2023)

List of Dr. Ue-Li Pen's Refereed Publications ([NASA ADS link](#))

1. Er, X., **Pen, U.-L.**, Sun, X., et al. (2023/07). "Plasma lensing with magnetic field and a small correction to the Faraday rotation measurement", *Monthly Notices of the Royal Astronomical Society*, 522, 3965-3971.
2. Chung, C.L., Inman, D., Wang, X., et al. (2023/06). "Neutrino Mass Constraints from Reconstructing the Large-scale Structure: Systematic Uncertainty", *Research in Astronomy and Astrophysics*, 23, 065007.
3. Amiri, M., Bandura, K., Chen, T., et al. (2023/04). "Detection of Cosmological 21 cm Emission with the Canadian Hydrogen Intensity Mapping Experiment", *The Astrophysical Journal*, 947, 16.
4. CHIME/FRB Collaboration, Andersen, B.C., Bandura, K., et al. (2023/04). "CHIME/FRB Discovery of 25 Repeating Fast Radio Burst Sources", *The Astrophysical Journal*, 947, 83.
5. Feldbrugge, J., **Pen, U.-L.**, & Turok, N. (2023/04). "Oscillatory path integrals for radio astronomy", *Annals of Physics*, 451, 169255.
6. Lu, R.-S., Asada, K., Krichbaum, T.P., et al. (2023/04). "A ring-like accretion structure in M87 connecting its black hole and jet", *Nature*, 616, 686-690.
7. Lin, R., van Kerkwijk, M.H., Main, R., et al. (2023/03). "Resolving the Emission Regions of the Crab Pulsar's Giant Pulses. II. Evidence for Relativistic Motion", *The Astrophysical Journal*, 945, 115.
8. CHIME/FRB Collaboration, Amiri, M., Andersen, B.C., et al. (2023/02). "Erratum: "The First CHIME/FRB Fast Radio Burst Catalog" (2021, *ApJS*, 257, 59)", *The Astrophysical Journal Supplement Series*, 264, 53.
9. Jorstad, S., Wielgus, M., Lico, R., et al. (2023/02). "The Event Horizon Telescope Image of the Quasar NRAO 530", *The Astrophysical Journal*, 943, 170.
10. Lin, F.X., Main, R.A., Jow, D., et al. (2023/02). "Plasma lensing near the eclipses of the Black Widow pulsar B1957+20", *Monthly Notices of the Royal Astronomical Society*, 519, 121-135.
11. Jia, H., Zhu, H.-M., & **Pen, U.-L.** (2023/01). "Galaxy Spin Classification. I. Z-wise versus S-wise Spirals with the Chirality Equivariant Residual Network", *The Astrophysical Journal*, 943, 32.
12. Yalinewich, A., & **Pen, U.-L.** (2022/10). "The moving mirror model for fast radio bursts", *Monthly Notices of the Royal Astronomical Society*, 515, 5682-5688.
13. Lin, H.-H., Lin, K.-y., Li, C.-T., et al. (2022/09). "BURSTT: Bustling Universe Radio Survey Telescope in Taiwan", *Publications of the Astronomical Society of the Pacific*, 134, 094106.
14. Collaboration, C., Amiri, M., Bandura, K., et al. (2022/08). "An Overview of CHIME, the Canadian Hydrogen Intensity Mapping Experiment", *The Astrophysical Journal Supplement Series*, 261, 29.
15. Issaoun, S., Wielgus, M., Jorstad, S., et al. (2022/08). "Resolving the Inner Parsec of the Blazar J1924-2914 with the Event Horizon Telescope", *The Astrophysical Journal*, 934, 145.
16. Jow, D.L., & **Pen, U.-L.** (2022/08). "Measuring lens dimensionality in extreme scattering

- events through wave optics", *Monthly Notices of the Royal Astronomical Society*, 514, 4069-4077.
17. Kader, Z., Leung, C., Dobbs, M., et al. (2022/08). "High-time resolution search for compact objects using fast radio burst gravitational lens interferometry with CHIME/FRB", *Physical Review D*, 106, 043016.
 18. Leung, C., Kader, Z., Masui, K.W., et al. (2022/08). "Constraining primordial black holes using fast radio burst gravitational-lens interferometry with CHIME/FRB", *Physical Review D*, 106, 043017.
 19. Chime/Frb Collaboration, A.B.C., Bandura, K., Bhardwaj, M., et al. (2022/07). "Sub-second periodicity in a fast radio burst", *Nature*, 607, 256-259.
 20. Broderick, A.E., Gold, R., Georgiev, B., et al. (2022/05). "Characterizing and Mitigating Intraday Variability: Reconstructing Source Structure in Accreting Black Holes with mm-VLBI", *The Astrophysical Journal*, 930, L21.
 21. Event Horizon Telescope Collaboration, Akiyama, K., Alberdi, A., et al. (2022/05). "First Sagittarius A* Event Horizon Telescope Results. VI. Testing the Black Hole Metric", *The Astrophysical Journal*, 930, L17.
 22. Event Horizon Telescope Collaboration, Akiyama, K., Alberdi, A., et al. (2022/05). "First Sagittarius A* Event Horizon Telescope Results. V. Testing Astrophysical Models of the Galactic Center Black Hole", *The Astrophysical Journal*, 930, L16.
 23. Event Horizon Telescope Collaboration, Akiyama, K., Alberdi, A., et al. (2022/05). "First Sagittarius A* Event Horizon Telescope Results. IV. Variability, Morphology, and Black Hole Mass", *The Astrophysical Journal*, 930, L15.
 24. Event Horizon Telescope Collaboration, Akiyama, K., Alberdi, A., et al. (2022/05). "First Sagittarius A* Event Horizon Telescope Results. III. Imaging of the Galactic Center Supermassive Black Hole", *The Astrophysical Journal*, 930, L14.
 25. Event Horizon Telescope Collaboration, Akiyama, K., Alberdi, A., et al. (2022/05). "First Sagittarius A* Event Horizon Telescope Results. II. EHT and Multiwavelength Observations, Data Processing, and Calibration", *The Astrophysical Journal*, 930, L13.
 26. Event Horizon Telescope Collaboration, Akiyama, K., Alberdi, A., et al. (2022/05). "First Sagittarius A* Event Horizon Telescope Results. I. The Shadow of the Supermassive Black Hole in the Center of the Milky Way", *The Astrophysical Journal*, 930, L12.
 27. Farah, J., Galison, P., Akiyama, K., et al. (2022/05). "Selective Dynamical Imaging of Interferometric Data", *The Astrophysical Journal*, 930, L18.
 28. Georgiev, B., Pesce, D.W., Broderick, A.E., et al. (2022/05). "A Universal Power-law Prescription for Variability from Synthetic Images of Black Hole Accretion Flows", *The Astrophysical Journal*, 930, L20.
 29. Wielgus, M., Marchili, N., Martí-Vidal, I., et al. (2022/05). "Millimeter Light Curves of Sagittarius A* Observed during the 2017 Event Horizon Telescope Campaign", *The Astrophysical Journal*, 930, L19.
 30. Motloch, P., **Pen, U.-L.**, & Yu, H.-R. (2022/04). "Observational search for primordial chirality violations using galaxy angular momenta", *Physical Review D*, 105, 083512.
 31. Motloch, P., **Pen, U.-L.**, & Yu, H.-R. (2022/04). "Correlating galaxy shapes and initial conditions: An observational study", *Physical Review D*, 105, 083504.

32. Zhu, H.-M., Mao, T.-X., & **Pen, U.-L.** (2022/04). "Cosmic Tidal Reconstruction with Halo Fields", *The Astrophysical Journal*, 929, 5.
33. Baker, D., Brisken, W., van Kerkwijk, M.H., et al. (2022/03). "Interstellar interferometry: precise curvature measurement from pulsar secondary spectra", *Monthly Notices of the Royal Astronomical Society*, 510, 4573-4581.
34. Wolz, L., Poursidou, A., Masui, K.W., et al. (2022/03). "H I constraints from the cross-correlation of eBOSS galaxies and Green Bank Telescope intensity maps", *Monthly Notices of the Royal Astronomical Society*, 510, 3495-3511.
35. Cassanelli, T., Leung, C., Rahman, M., et al. (2022/02). "Localizing FRBs through VLBI with the Algonquin Radio Observatory 10 m Telescope", *The Astronomical Journal*, 163, 65.
36. Kirsten, F., Marcote, B., Nimmo, K., et al. (2022/02). "A repeating fast radio burst source in a globular cluster", *Nature*, 602, 585-589.
37. Marthi, V.R., Bethapudi, S., Main, R.A., et al. (2022/01). "Burst properties of the highly active FRB20201124A using uGMRT", *Monthly Notices of the Royal Astronomical Society*, 509, 2209-2219.
38. Satapathy, K., Psaltis, D., Özel, F., et al. (2022/01). "The Variability of the Black Hole Image in M87 at the Dynamical Timescale", *The Astrophysical Journal*, 925, 13.
39. Amiri, M., Andersen, B.C., Bandura, K., et al. (2021/12). "The First CHIME/FRB Fast Radio Burst Catalog", *The Astrophysical Journal Supplement Series*, 257, 59.
40. Jow, D.L., Lin, F.X., Tyhurst, E., et al. (2021/11). "Imaginary images and Stokes phenomena in the weak plasma lensing of coherent sources", *Monthly Notices of the Royal Astronomical Society*, 507, 5390-5402.
41. Lin, F.X., Lin, H.-H., Luo, J., et al. (2021/11). "Profile changes associated with dispersion measure events in PSR J1713+0747", *Monthly Notices of the Royal Astronomical Society*, 508, 1115-1127.
42. Bij, A., Lin, H.-H., Li, D., et al. (2021/10). "Kinematics of Crab Giant Pulses", *The Astrophysical Journal*, 920, 38.
43. Marthi, V.R., Simard, D., Main, R.A., et al. (2021/10). "Scintillation of PSR B1508+55 - the view from a 10 000-km baseline", *Monthly Notices of the Royal Astronomical Society*, 506, 5160-5169.
44. Switzer, E.R., Barrentine, E.M., Cataldo, G., et al. (2021/10). "Experiment for cryogenic large-aperture intensity mapping: instrument design", *Journal of Astronomical Telescopes, Instruments, and Systems*, 7, 044004.
45. Janssen, M., Falcke, H., Kadler, M., et al. (2021/07). "Event Horizon Telescope observations of the jet launching and collimation in Centaurus A", *Nature Astronomy*, 5, 1017-1028.
46. Main, R., Lin, R., van Kerkwijk, M.H., et al. (2021/07). "Resolving the Emission Regions of the Crab Pulsar's Giant Pulses", *The Astrophysical Journal*, 915, 65.
47. Kocherlakota, P., Rezzolla, L., Falcke, H., et al. (2021/05). "Constraints on black-hole charges with the 2017 EHT observations of M87*", *Physical Review D*, 103, 104047.
48. Narayan, R., Palumbo, D.C.M., Johnson, M.D., et al. (2021/05). "The Polarized Image of a Synchrotron-emitting Ring of Gas Orbiting a Black Hole", *The Astrophysical Journal*, 912, 35.

49. Group, E.M.S.W., Algaba, J.C., Anczarski, J., et al. (2021/04). "Broadband Multi-wavelength Properties of M87 during the 2017 Event Horizon Telescope Campaign", *The Astrophysical Journal*, 911, L11.
50. Event Horizon Telescope Collaboration, Akiyama, K., Algaba, J.C., et al. (2021/03). "First M87 Event Horizon Telescope Results. VIII. Magnetic Field Structure near The Event Horizon", *The Astrophysical Journal*, 910, L13.
51. Event Horizon Telescope Collaboration, Akiyama, K., Algaba, J.C., et al. (2021/03). "First M87 Event Horizon Telescope Results. VII. Polarization of the Ring", *The Astrophysical Journal*, 910, L12.
52. Goddi, C., Martí-Vidal, I., Messias, H., et al. (2021/03). "Polarimetric Properties of Event Horizon Telescope Targets from ALMA", *The Astrophysical Journal*, 910, L14.
53. Motloch, P., Yu, H.-R., **Pen, U.-L.**, et al. (2021/01). "An observed correlation between galaxy spins and initial conditions", *Nature Astronomy*, 5, 283-288.
54. Wucknitz, O., Spitler, L.G., & **Pen, U.L.** (2021/01). "Cosmology with gravitationally lensed repeating fast radio bursts", *Astronomy and Astrophysics*, 645, A44.
55. Marthi, V.R., Gautam, T., Li, D.Z., et al. (2020/12). "Detection of 15 bursts from the fast radio burst 180916.J0158+65 with the upgraded Giant Metrewave Radio Telescope", *Monthly Notices of the Royal Astronomical Society*, 499, L16-L20.
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58. Psaltis, D., Medeiros, L., Christian, P., et al. (2020/10). "Gravitational Test beyond the First Post-Newtonian Order with the Shadow of the M87 Black Hole", *Physical Review Letters*, 125, 141104.
59. Li, J., Zuo, S., Wu, F., et al. (2020/09). "The Tianlai Cylinder Pathfinder array: System functions and basic performance analysis", *Science China Physics, Mechanics, and Astronomy*, 63, 129862.
60. Wielgus, M., Akiyama, K., Blackburn, L., et al. (2020/09). "Monitoring the Morphology of M87* in 2009-2017 with the Event Horizon Telescope", *The Astrophysical Journal*, 901, 67.
61. Kim, J.-Y., Krichbaum, T.P., Broderick, A.E., et al. (2020/08). "Event Horizon Telescope imaging of the archetypal blazar 3C 279 at an extreme 20 microarcsecond resolution", *Astronomy and Astrophysics*, 640, A69.
62. Broderick, A.E., Gold, R., Karami, M., et al. (2020/07). "THEMIS: A Parameter Estimation Framework for the Event Horizon Telescope", *The Astrophysical Journal*, 897, 139.
63. Gold, R., Broderick, A.E., Younsi, Z., et al. (2020/07). "Verification of Radiative Transfer Schemes for the EHT", *The Astrophysical Journal*, 897, 148.
64. Keating, L.C., & **Pen, U.-L.** (2020/07). "Exploring the dispersion measure of the Milky Way halo", *Monthly Notices of the Royal Astronomical Society*, 496, L106-L110.
65. Chime/Frb, C., Amiri, M., Andersen, B.C., et al. (2020/06). "Periodic activity from a fast radio burst source", *Nature*, 582, 351-355.

66. Roelofs, F., Janssen, M., Natarajan, I., et al. (2020/04). "SYMBA: An end-to-end VLBI synthetic data generation pipeline. Simulating Event Horizon Telescope observations of M 87", *Astronomy and Astrophysics*, 636, A5.
67. Fonseca, E., Andersen, B.C., Bhardwaj, M., et al. (2020/03). "Nine New Repeating Fast Radio Burst Sources from CHIME/FRB", *The Astrophysical Journal*, 891, L6.
68. Yu, H.-R., Motloch, P., **Pen, U.-L.**, et al. (2020/03). "Probing Primordial Chirality with Galaxy Spins", *Physical Review Letters*, 124, 101302.
69. Ade, P.A.R., Anderson, C.J., Barrentine, E.M., et al. (2020/01). "The Experiment for Cryogenic Large-Aperture Intensity Mapping (EXCLAIM)", *Journal of Low Temperature Physics*, 199, 1027-1037.
70. Marcote, B., Nimmo, K., Hessels, J.W.T., et al. (2020/01). "A repeating fast radio burst source localized to a nearby spiral galaxy", *Nature*, 577, 190-194.
71. CHIME/FRB Collaboration, Andersen, B.C., Bandura, K., et al. (2019/11). "CHIME/FRB Discovery of Eight New Repeating Fast Radio Burst Sources", *The Astrophysical Journal*, 885, L24.
72. Simard, D., **Pen, U.L.**, Marthi, V.R., et al. (2019/10). "Disentangling interstellar plasma screens with pulsar VLBI: combining auto- and cross-correlations", *Monthly Notices of the Royal Astronomical Society*, 488, 4963-4971.
73. Simard, D., **Pen, U.L.**, Marthi, V.R., et al. (2019/10). "A comparison of interferometric and single-dish methods to measure distances to pulsar scattering screens", *Monthly Notices of the Royal Astronomical Society*, 488, 4952-4962.
74. Josephy, A., Chawla, P., Fonseca, E., et al. (2019/09). "CHIME/FRB Detection of the Original Repeating Fast Radio Burst Source FRB 121102", *The Astrophysical Journal*, 882, L18.
75. Inman, D., **Pen, U.-L.**, & Villaescusa-Navarro, F. (2019/08). "Dipole distortions in the intergalactic medium", *Monthly Notices of the Royal Astronomical Society*, 487, 4181-4189.
76. Porth, O., Chatterjee, K., Narayan, R., et al. (2019/08). "The Event Horizon General Relativistic Magnetohydrodynamic Code Comparison Project", *The Astrophysical Journal Supplement Series*, 243, 26.
77. Li, D., Zhu, H.-M., & **Pen, U.-L.** (2019/07). "Cross-correlation of the kinematic Sunyaev-Zel'dovich effect and 21 cm intensity mapping with tidal reconstruction", *Physical Review D*, 100, 023517.
78. Kodwani, D., Meerburg, P.D., **Pen, U.-L.**, et al. (2019/06). "Initial conditions of the Universe: A sign of the sine mode", *Physical Review D*, 99, 123518.
79. Yu, H.-R., **Pen, U.-L.**, & Wang, X. (2019/06). "Parity-odd neutrino torque detection", *Physical Review D*, 99, 123532.
80. Event Horizon Telescope Collaboration, Akiyama, K., Alberdi, A., et al. (2019/04). "First M87 Event Horizon Telescope Results. VI. The Shadow and Mass of the Central Black Hole", *The Astrophysical Journal*, 875, L6.
81. Event Horizon Telescope Collaboration, Akiyama, K., Alberdi, A., et al. (2019/04). "First M87 Event Horizon Telescope Results. V. Physical Origin of the Asymmetric Ring", *The Astrophysical Journal*, 875, L5.

82. Event Horizon Telescope Collaboration, Akiyama, K., Alberdi, A., et al. (2019/04). "First M87 Event Horizon Telescope Results. IV. Imaging the Central Supermassive Black Hole", *The Astrophysical Journal*, 875, L4.
83. Event Horizon Telescope Collaboration, Akiyama, K., Alberdi, A., et al. (2019/04). "First M87 Event Horizon Telescope Results. III. Data Processing and Calibration", *The Astrophysical Journal*, 875, L3.
84. Event Horizon Telescope Collaboration, Akiyama, K., Alberdi, A., et al. (2019/04). "First M87 Event Horizon Telescope Results. II. Array and Instrumentation", *The Astrophysical Journal*, 875, L2.
85. Event Horizon Telescope Collaboration, Akiyama, K., Alberdi, A., et al. (2019/04). "First M87 Event Horizon Telescope Results. I. The Shadow of the Supermassive Black Hole", *The Astrophysical Journal*, 875, L1.
86. Li, D., Lin, F.X., Main, R., et al. (2019/04). "Constraining magnetic fields through plasma lensing: application to the Black Widow pulsar", *Monthly Notices of the Royal Astronomical Society*, 484, 5723-5733.
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88. CHIME/FRB Collaboration, Amiri, M., Bandura, K., et al. (2019/01). "Observations of fast radio bursts at frequencies down to 400 megahertz", *Nature*, 566, 230-234.
89. Wang, X., & Pen, U.-L. (2019/01). "Understanding the Reconstruction of the Biased Tracer", *The Astrophysical Journal*, 870, 116.
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91. Mahajan, N., van Kerkwijk, M.H., Main, R., et al. (2018/11). "Mode Changing and Giant Pulses in the Millisecond Pulsar PSR B1957+20", *The Astrophysical Journal*, 867, L2.
92. Roy, J., Chengalur, J.N., & Pen, U.-L. (2018/09). "A Post-correlation Beamformer for Time-domain Studies of Pulsars and Transients", *The Astrophysical Journal*, 864, 160.
93. CHIME/FRB Collaboration, Amiri, M., Bandura, K., et al. (2018/08). "The CHIME Fast Radio Burst Project: System Overview", *The Astrophysical Journal*, 863, 48.
94. Yu, H.-R., Pen, U.-L., & Wang, X. (2018/08). "CUBE: An Information-optimized Parallel Cosmological N-body Algorithm", *The Astrophysical Journal Supplement Series*, 237, 24.
95. Zhu, H.-M., Pen, U.-L., Yu, Y., et al. (2018/08). "Recovering lost 21 cm radial modes via cosmic tidal reconstruction", *Physical Review D*, 98, 043511.
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97. Anderson, C.J., Luciw, N.J., Li, Y.C., et al. (2018/05). "Low-amplitude clustering in low-redshift 21-cm intensity maps cross-correlated with 2dF galaxy densities", *Monthly Notices of the Royal Astronomical Society*, 476, 3382-3392.
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100. Lin, H.-H., Masui, K., **Pen, U.-L.**, et al. (2018/03). "Improved pulsar timing via principal component mode tracking", *Monthly Notices of the Royal Astronomical Society*, 475, 1323-1330.
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124. Coulson, D., **Pen, U.-L.**, & Turok, N. (1993/05). "*Degree Scale Microwave Anisotropies in NonGaussian Theories of Cosmic Structure Formation*", arXiv e-prints, hep-ph/9305261.
125. **Pen, U.L.**, Howard, A., Huang, X., et al. (1993/01). "*A well sampled light curve for Q2237+0305*", Liege International Astrophysical Colloquia, 31, 111.

Presentations (2019-2023)

1. Ue-Li Pen (2023). Why do galaxies rotate?. 2023 Physics Colloquium, Department of Physics, National Chung Hsing University (March 10, 2023), Taichung, Taiwan
2. Ue-Li Pen (2023). Imaginary images: FRBs, quantum mechanics and quantum cosmology. Colloquium in National Chung Cheng University (February 15, 2023), Chiayi, Taiwan
3. Ue-Li Pen (2023). Keynote invited lecture, 2nd NCTS/UCAT/NTHU International Astronomy Winter School: Magnetism in Star-Forming and Galactic Environments, February 4th, 2023
4. Ue-Li Pen (2023). Classical Mechanics, Quantum Mechanics, Quantum Cosmology: new view on the universe. National Cheng Kung University (January 18, 2023), Tainan, Taiwan
5. Ue-Li Pen (2023). Imaginary images: FRBs, quantum mechanics and quantum cosmology. Colloquium in National Cheng Kung University (January 6, 2023), Tainan, Taiwan
6. Ue-Li Pen (2022) "News From Black Hole Event Horizons", Institute of Astronomy and Astrophysics, Academia Sinica, November 19, 2022
7. Ue-Li Pen (2022)"Wave particle duality revisited: Picard-Lefschetz interpretation in astrophysics, quantum cosmology and beyond",Institute of Physics, Academia Sinica, November 8, 2022
8. Ue-Li Pen (2022)"Black Hole", Academia Sinica, October 29, 2022
9. Ue-Li Pen (2022)"Surveying the nearest FRBs", Cornell University, October 11, 2022
10. Ue-Li Pen (2022)"Cosmological scalar helicity", Kavli Institute for the Physics and Mathematics of the Universe, September 5, 2022
11. Ue-Li Pen (2022)"Imaginary Paths: new tools for cosmology, GW, FRBs", Association of Asia Pacific Physical Societies, August 26, 2022
12. Ue-Li Pen (2022)"Probing the universe with Fast Radio Bursts", Canadian Institute for Theoretical Astrophysics(CITA), July 11, 2022
13. Ue-Li Pen (2022)"From GRBs, Baryogenesis to FRBs", Astrophysics in the Next Decade: From the First Stars to Intelligent Life(CIERA conference), June 6th, 2022
14. Ue-Li Pen (2022)"Probing the universe with Fast Radio Bursts", Canadian Institute for Theoretical Astrophysics(CITA), July 11, 2022
15. Ue-Li Pen (2022)"From GRBs, Baryogenesis to FRBs", Astrophysics in the Next Decade: From the First Stars to Intelligent Life(CIERA conference), June 6th, 2022
16. Ue-Li Pen (2022)"Turok-Witten-Picard-Lefschetz quantum mechanics and quantum gravity"National Taiwan University. April 11, 2022
17. Ue-Li Pen (2022) "Classical Mechanics, Quantum Mechanics, Quantum Cosmology: new view on the universe" National Changhua University of Education. March 9,2022
18. Ue-Li Pen (2022) "Classical Mechanics, Quantum Mechanics, Quantum Cosmology: How the universe may have begun" National Yang Ming Chiao Tung University. March 3, 2022
19. Ue-Li Pen (2022) "FRB Physics". National Central University. Feb 18, 2022.
20. Ue-Li Pen (2022). "Why do spiral galaxies rotate, and what can we learn from that?". Astronomy on Tap. Taipei, Taiwan. Jan 21, 2022. 22 minutes.

21. Ue-Li Pen (2022). “Classical and quantum completeness of transient black hole space times”. National Taiwan University, Taipei, Taiwan. January 14, 2022.
22. Ue-Li Pen (2021). “Broadbeam Radio Survey Telescope (BRST)”. Science at Low Frequencies(SALF). December 8, 2021.
23. Ue-Li Pen (2021). “FRB Physics”. National Taiwan Normal University, Taipei, Taiwan. November 16. 75 minutes.
24. Ue-Li Pen (2021). “Picard-Lefschetz Path Integrals for astrophysical lensing: imaging stars, planets and dark matter”. National Taiwan University, Taipei, Taiwan. December 14. 60 minutes.
25. Ue-Li Pen (2021). “FRBs: Coherent probes of space-time”. FRB 2021(Virtual), International Conference. August.,4. 20 minutes. Plenary.
26. Ue-Li Pen (2021). “FRBs: Coherent probes of space-time”.CITA, Toronto, Canada. July.,22. 60 minutes.
27. Ue-Li Pen (2021). “Wave Optics Lensing: cosmology and fundamental physics from gravitational and plasma lensing of FRBs and other coherent sources”. Heidelberg Institute for Theoretical Physics (virtual), Heidelberg, Germany. May.,18. 60 minutes
28. Ue-Li Pen (2020). “Cosmic fossils: Galaxy Directional Spin”. Edinburgh’s Royal Observatory (virtual), Edinburgh, United Kingdom. October., 28. 60 minutes.
29. Ue-Li Pen. (2020). “the Stockert Radioteleskop upgrade”. Dunlap Institute for Astronomy and Astrophysics, University of Toronto. Toronto, Canada. Apr., 20. 20 mins.
30. Ue-Li Pen (2020). “Gravitational Waves: Resolution, Sources, Confusion”. Max Planck Institute for Radio Astronomy. Bonn, Germany. Feb., 19. 60 mins
31. Ue-Li Pen (2020). “Galaxy spin: a cosmic fossil”. Albert-Einstein-Institute and the Leibniz-Institute for Astrophysics. Potsdam, Germany. Feb., 20. 45 mins.
32. Ue-Li Pen (2020). “Fast Radio Bursts: CHIME and beyond”. Academia Sinica. Taipei, Taiwan. Jan., 16. 45 mins.
33. Luo, J.; Pen, U.; Van Kerkwijk, M.; Demorest, P.; Main, R. (2020). Is the Black Widow Pulsar Eclipsed by its Companion?. Bulletin of the American Astronomical Society. 235th American Astronomical Society meeting, Honolulu, United States. American Astronomical Society. (Conference Date: 2020/1. Invited)
34. Ue-Li Pen. (2020). Nonlinear Reconstruction: the Cosmic Web Inside Out. the Lorentz Center workshop. Leiden University, Netherlands. Lorentz Center. (Conference Date: 2020/1. Invited)
35. Ue-Li Pen. (2019). “Fast Radio Bursts: present and future”. Oxford University. The United Kingdom. Nov., 25. 45 mins.
36. Ue-Li Pen. (2019). “CHIME and beyond”. Laboratoire d'Annecy-le-Vieux de Physique Théorique. Annecy, France. Nov., 14. 60 mins.
37. Ue-Li Pen. (2019). “Gravitational Waves”.Max Planck Institute for Theoretical Astrophysics. Bonn, Germany. Oct., 16. 30 mins.
38. Ue-Li Pen. (2019). The CHIME Telescope. Arecibo IPS Workshop. Puerto Rico. (Conference Date: 2019/12. invited)

39. Ue-Li Pen. (2019). Cosmology and fundamental physics with FRBs. Cosmological Frontiers in Fundamental Physics 2019. Waterloo, Canada. Perimeter Institute. (Conference Date: 2019/9. Invited)
40. Ue-Li Pen. (2019). Synergy of Plasma Lensing and Gravitational Lensing. Gravity meets Plasma workshop. South-Western Institute for Astronomy Research, China. (Conference Date: 2019/8. Invited)
41. Ue-Li Pen. (2019). 21cm intensity mapping: current results and future potential. Future of Canadian Radio Astronomy Workshop.
42. Ue-Li Pen. (2019). The Dominion Radio Astrophysical Observatory, British Columbia, Canada. (Conference Date: 2019/5. Invited)
43. Ue-Li Pen. (2019). Interstellar Scintillation Theory and Experimentation: the Potential of 1-D Scintillation Screens in the Interstellar Medium. Scintillating Science: Cutting-Edge Science Achieved Through the Observations of Radio Scintillation Conference. South Africa National Space Agency, South Africa. (Conference Date: 2019/7. Invited)