

Chun Ning (Jeanie) Lau (Biographical Sketch)

Professional Preparation

University of Chicago, Chicago, IL	Physics	B.A.	1994
Harvard University, Cambridge, MA	Physics	M.A.	1997
Harvard University, Cambridge, MA	Physics	Ph.D.	2001

Appointments

2017 – present	Professor, Ohio State University
2013 – 2016	Director, CONSEPT center, University of California-Riverside
2012 – 2016	Professor, Physics Dept, University of California-Riverside
2009 – 2012	Associate Professor, Physics Dept, University of California-Riverside
2004 – 2009	Assistant Professor, Physics Dept, University of California–Riverside
2002 – 2004	Research Associate, Hewlett-Packard Laboratory

Publications:

Total: 133

h-index: 64

Products Related to the Project

1. “Evidence for Flat Band Dirac Superconductor Originating from Quantum Geometry”, Haidong Tian, Shi Che, Tianyi Xu, Patrick Cheung, Kenji Watanabe, Takashi Taniguchi, Mohit Randeria, Fan Zhang, Chun Ning Lau, Marc W. Bockrath, *Nature*, 614, 440 (2023).
2. “Layer- and Gate-tunable Spin-Orbit Coupling in a High Mobility Few-Layer Semiconductor”, D. Shcherbakov, P. Stepanov, S. Memaran, Y. Wang, Y. Xin, J. Yang, K. Wei, R. Baumbach, W. Zheng, K. Watanabe, T. Taniguchi, M. Bockrath, D. Smirnov, T. Siegrist, W. Windl, L. Balicas, and **C.N. Lau**, *Science Advances*, accepted (2020).
3. “Correlated Insulating and Superconducting States in Twisted Bilayer Graphene Below the Magic Angle”, E. Codecido, Q. Wang, R. Koester, S. Che, H. Tian, R. Lv, S. Tran, K. Watanabe, T. Taniguchi, F. Zhang, M. Bockrath, and **C. N. Lau**, *Science Advances* 5, eaaw9770 (2019).
4. “Robust Tunable Spin Transport Through a Graphene Quantum Hall Antiferromagnet”, P. Stepanov, S. Che, D. Shcherbakov, K. Thilagar, G. Voigt, M. W. Bockrath, D. Smirnov, K. Watanabe, T. Taniguchi, R. Lake, Y. Barlas, A. H. MacDonald, **C. N. Lau**, *Nature Physics*, 14, 907 (2018)
5. “Transport Spectroscopy of Symmetry-Broken Insulating States in Bilayer Graphene”, J. Velasco Jr., L. Jing, W. Bao, Y. Lee, V. Aji, M. Bockrath, **C.N. Lau**, C. Varma, R. Stillwell, D. Smirnov, Fan Zhang, and A. MacDonald, *Nature Nanotechnology*, 7, 156 (2012).

Other Significant Products

1. “Tunneling Plasmonics in Bilayer Graphene”, Z. Fei, E. G. Iwinski, G. X. Ni, L. M. Zhang, W. Bao, A. S. Rodin, Y. Lee, M. Wagner, M. K. Liu, S. Dai, M. D. Goldflam, M. Thiemens, F. Keilmann, **C. N. Lau**, A. H. Castro-Neto, M. M. Fogler, and D. N. Basov, *Nano Letters*, 15, 4973 (2015).
2. “Gate-tuning of graphene plasmons revealed by infrared nano-imaging”, Z. Fei, A.S. Rodin, G.O. Andreev, W. Bao, A.S. McLeod, M. Wagner, M. Zhang, Z. Zhao, M. Thiemens, G. Dominguez, M.M. Fogler, A.H. Castro Neto, **C. N. Lau**, F. Kellmann, D.N. Basov, *Nature*, 487, 82 (2012).
3. “Generation of photovoltage in graphene on a femtosecond timescale through efficient carrier heating”, K.J. Tielrooij, L. Piatkowski, M. Massicotte, A. Woessner, Q. Ma, Y. Lee, K.S. Myhro, **C.N. Lau**, P. Jarillo-Herrero, N.F. van Hulst, F.H.L. Koppens, , *Nature Nanotechnology*, 10, 437 (2015).
4. “Stacking-dependent Band Gap and Quantum Transport in Trilayer graphene”, W. Bao, L. Jing, J. Velasco Jr., Y. Lee, G. Liu, D. Tran, B. Standley, M. Aykol, S. B. Cronin, D. Smirnov, M. Koshino, E. McCann, M. Bockrath, and **C.N. Lau**, *Nature Physics*, 7, 948 (2011).
5. “Controlled Ripple Texturing of Suspended Graphene and Ultrathin Graphite Membranes”, W. Bao, F. Miao, Z. Chen, H. Zhang, W. Jang, C. Dames, and **C. N. Lau**, *Nature Nanotechnology*, 4, 562 (2009).

Synergistic Activities

1. Tutorial organizer/presenter on graphene and 2D materials at MRS, APS and AVS meetings
2. Founding faculty member of UCR Undergraduate research Journal
3. Invited speaker at USC Women in Physics Conference, KITP High School Teachers Conference.
4. Member of External User Advisory Committee of National High Magnetic Field Lab (2013-2016).
5. Member of National Research Council Committee on High Magnetic Field Science (2012-2013).
6. Associate Editor, Nano Letters (2016-present).