

Curriculum Vitae

Name: Kam H. Chu, M.S., Ph.D.

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Education

- Ph.D. in Physics (Experimental Condensed Matter Physics / High-Temperature Superconductivity), Texas Center for Superconductivity / University of Houston
- M.S. in Physics, University of Houston
- B.S. in Physics/Computer Science, Texas Southern University

Teaching Experience

- 2021-Present, Professor of Physics and Astronomy at Houston Community College
- 2020-Present, Adjunct Professor at University of Houston Downtown
- 2012-Present, Adjunct Professor at San Jacinto College
- 2012-2021, Adjunct Professor at Houston Community College
- 2013-2021, Adjunct Professor of Physics at WCJC at University of Houston Sugar Land
- 2013-2021, Professor of Physics at WCJC at University of Houston Sugar Land
- 2012-2015, Adjunct Professor at Lone Star College
- 2012-2013, Lead Physics and Mathematics Instructor at Energized for STEM Academy
- 2003-2009, Associate Professor of Physics at Texas Southern University
- 1995-1998, Instructor of Computer Science and Physics at Texas Southern University

Courses Taught: College/University Physics Lecture/Lab, Classical Mechanics, Electrodynamics, Quantum Mechanics (Graduate Level), Renormalization-Group Theory of Critical Phenomena (Graduate Level), Pre-Calculus, Calculus I/II/III, Ordinary Differential Equations, Introduction to Computer Science, Introduction to UNIX Operating Systems, Computer Networking.

Professional, Technical, and Work-related Experience

- 2009-Present: Information Technology Consultant
- 2003-2009: Co-Director of Computational Research Lab, RCMI at TSU
- 2002-2005: Technical Consultant, Methodist Hospital
- 2000-2002: Technical Manager, BroadVision, Inc.
- 1999-2000: Senior Quantitative Analyst, SunGard Energy Trading
- 1998-1999: Postdoctoral Fellow, Texas Center for Superconductivity and Advanced Materials (TCSAM)
- 1994-1998: Research Assistant, Texas Center for Superconductivity at University of Houston
- 1991-1994: Graduate Teaching Assistant, Physics Department, University of Houston
- 1985-1988: Chief Operation Officer, Po-On Property Management Inc., Macau, Portugal

Professional Achievements and Awards

- TCCTA 2022 Physics & Engineering Section Chair
- TCCTA 2021 Physics & Engineering Section Chair
- TCCTA 2020 Physics & Engineering Section Chair
- WCJC Financial Aid Appeal Committee 2016-2020
- WCJC Library and Learning Resources Committee 2015-2016
- WCJC College Grievance Committee 2014-2015
- Member, 2018-2020 OpenStax Faculty Advisory Board.
- Faculty Oral Presentation Award 1st Runner-up, TSU Research Week, 2007
- Faculty Poster Presentation Award 1st Runner-up, TSU Research Week, 2006
- Invited Board Member of CDW-G Higher Education Advisory Board, 2006
- Invited Club Member of the McGraw-Hill Science, Engineering and Mathematics (SEM) President's Club, 2006
- NSF Faculty Attendee at Activity Based Physics Faculty Institutes (ABPFI), University of Oregon, summer 2005
- Faculty Poster Presentation Award 1st Runner-up, TSU Research Week, 2005
- Methodist Hospital Professional Go-Live Appreciation Award, 2004
- Faculty Attention Award: Federated Computing Research Conference ACM, 2003
- Appreciation Award, BroadVision Global Services, 2002
- Rising Star Award: BroadVision Global Services, 2001
- Winner of 10th Semi-Annual symposium at Texas Center for Superconductivity and Advanced Materials, 1998
- Outstanding Physics Graduate Researcher of the Year, University of Houston, 1995

Selected Publications

- *Evidence for Large Static and Dynamic Distortions in High-T_c Superconducting YBa₂Cu₃O_{7-δ} Crystals over a Wide Temperature Range*, R. P. Sharma, T. Venkatesan, Z. H. Zhang, J. R. Liu, R. K. Chu, and Wei-Kan. Chu., *Phys. Rev. Lett.* **77**, 4624-4627 (1996).
- *Phonon Anomaly in High Temperature Superconducting YBa₂Cu₃O_{7-δ} Crystals*, R. P. Sharma, Z. H. Zhang, J. R. Liu, T. Venkatesan, W. K. Chu, and R. K. Chu, *Proceedings. Of the 10th Anniversary HTS Workshop on Physics, Materials and Applications*, U. Gubser, and K. A. Müller (Nobel Prize Winner), Editors, 353-356 World Scientific (1996).
- *Thermal Annealing of Ar Ion Bombard Lithium Tantalate (LiTaO₃) Single Crystal*, Z. H. Zhang, I. A. Rusakova, J. Wilson, R. K. Chu, and W. K. Chu, *Nucl. Instr. And Meth. B* **127/128**, 515-519 (1997).
- *Anomalous Magnetoresistance of YNi₂B₂C Superconducting Single Crystals*, R. K. Chu, W. K. Chu, Q. Y. Chen, Z. H. Zhang, and J. H. Miller, Jr., *J. Phys, Condens. Matter* **12**, 275-280 (2000).
- *Angular Dependence of the Vortex-glass Phase in YNi₂B₂C crystals*, R. K. Chu, Q.Y. Chen, W. K. Chu, J.H. Miller, Jr., *Physica C* **341-348**, 1111-1112 (2000).
- *Time-correlated Tunneling of Solitons in Charge and Spin Density Waves*, J. H. Miller, Jr., E. Prodan, R. K. Chu, and C. Ordóñez, *Physica C* **341-348**, 763-764 (2000).
- *Zero-bias Resistance Anomalies in Normal Metal/Charge-density Wave Interfaces*, J. P. McCarten, J. H. Miller, Jr., X. W. Xu, I. Pirtle, J. R. Liu, Wei-Kan Chu, J. R. Claycomb, and Rambis K. Chu, *Physica C* **341-348**, 789-790 (2000).

- *Anomalous Magnetoresistance of Borocarbide Superconductor YNi_2B_2C* , R. K. Chu, Z. H. Zhang, W. K. Chu, and J. H. Miller, Jr., *Inter. J. of Modern Physics B* 14, 29-31, 3412-3417 (2000).
- *Building Student Forums with PHP and MySQL Technologies*, R. K. Chu and E. F. Walker, *Journal of ACET*, Vol. 2, No. 1, (2004).
- *Metric Variation Resulting from the Casimir Effect*, J. R. Claycomb and R. Chu, *arxiv: physics/0602067*.
- *Angular Dependent I-V Characteristics in Borocarbide Superconductor YNi_2B_2C* , R. M. Chu, Q. Y. Chen, and W. K. Chu, *J. Phys, Condens. Matter* 12, 4085-4092 (2006).
- *Geometrical dynamics in a transitioning superconducting sphere*, J. R. Claycomb and R. K. Chu, *Progress in Physics* 4, 41-43. (2006).
- *Metric variation inside transitioning superconducting shells*, J. R. Claycomb and R. K. Chu, *EJTP*, 3, No. 13 (2006).