

Curriculum Vitae
Richard L. Plambeck (plambeck@astro.berkeley.edu)

Education

- 1971 S.B., Physics, M.I.T.
1978 Ph.D., Physics, University of California, Berkeley

Professional Employment

- 1994- Research Astronomer, Radio Astronomy Lab, University of California
1986-1994 Associate Research Astronomer, Radio Astronomy Lab, University of California
1978-1986 Assistant Research Astronomer, Radio Astronomy Lab, University of California

Professional Societies

American Astronomical Society, Union Radioscopique International

Ten selected publications

- “Observations of CO in L1551 - Evidence for stellar wind driven shocks”, Snell, R. L., Loren, R. B., & Plambeck, R. L. 1980, ApJ, 239L, 17
- “A Continuously Tunable 85-115 GHz Gunn Oscillator”, Carlstrom, J. E., Plambeck, R. L., & Thornton, D. D. 1985, IEEE-MTT, 33, 610
- “Velocity Structure of the Orion-IRc2 SiO maser - Evidence for an 80 AU diameter circumstellar disk”, Plambeck, R. L., Wright, M. C. H., and Carlstrom, J. E. 1990, ApJ, 348L, 65
- “A 4 K Gifford-McMahon Refrigerator for Radio Astronomy”, Plambeck, R., Thatte, N., & Sykes, P. 1993, Proceedings of the 7th International Cryocoolers Conference, p. 401
- “Subarcsecond-Resolution 86 GHz Continuum Maps of Orion KL”, Plambeck, R. L., Wright, M. C. H., Mundy, L. G., & Looney, L. W. 1995, ApJ, 455L, 189
- “High Resolution Millimeter-Wave Mapping of Linearly Polarized Dust Emission: Magnetic Field Structure in Orion”, Rao, R., Crutcher, R. M., Plambeck, R. L., & Wright, M. C. H. 1998, ApJ, 502L, 75
- “Magnetic Field Morphology of Orion IRc2 from 86 GHz SiO Maser Polarization Images”, Plambeck, R. L., Wright, M. C. H., and Rao, R. 2003, ApJ, 594, 911.
- “Giant Molecular Clouds in M33. I. BIMA All-Disk Survey” Engargiola, G., Plambeck, R. L., Rosolowsky, E., & Blitz L. 2003, ApJS, 149, 343
- “A Turnstile Junction Waveguide Orthomode Transducer,” Navarrini, A. & Plambeck, R. L. 2006, IEEE-MTT, 54, 272
- “Tracing the Bipolar Outflow from Orion Source I” Plambeck, R.L et al. 2009, ApJ, 704, L25.

Activities

- UC Berkeley project scientist for CARMA.
- Instrumentation development for mm astronomy. Past significant accomplishments include widely tunable Gunn oscillators (with John Carlstrom), 4 Kelvin closed cycle cryocoolers (with Niranjana Thatte), automated receiver tuning (with Niranjana Thatte), SIS receivers covering the 3mm and 1mm bands (with Greg Engargiola), 3mm and 1mm polarimeters (with Ramprasad Rao), a roundtrip phase measurement system for optical fiber, orthomode transducers (with Alessandro Navarrini), and broadband waveguide circular polarizers.
- Helped teach yearly sessions of the BIMA and CARMA summer schools since 1988. Each week-long session provides intensive training in interferometry concepts, instrumentation, and data reduction. Students are drawn from many outside universities as well as the CARMA institutions.
- Served on numerous ALMA design reviews. Member of the ALMA Joint Receiver Development Group from 1999-2002.

Graduate Students Supervised (informal): John Carlstrom, Niranjana Thatte, Ramprasad Rao, Charles Hull

Postdoctoral Research Fellows Supervised: Greg Engargiola, Alessandro Navarrini, Alberto Bolatto