

CURRICULUM VITAE

Christopher Emil Groppi

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Professional Preparation:

Cornell University, Astronomy, B.A. 1997.
University of Arizona, Astronomy with minor in Electrical & Computer Engineering, Ph.D. 2003.
National Radio Astronomy Observatory, Astronomy and Receiver Engineering, 2003-2005.
Assistant Staff Astronomer, Steward Observatory, 2005-2009.
National Science Foundation Astronomy and Astrophysics Postdoctoral Fellow 2006-2009.

Appointments:

Assistant Professor, Arizona State University School of Earth and Space Exploration, 2009-present.

Five most relevant publications:

Groppi, C.E., Walker, C.K., Kulesa, C., Golish, D., Kloosterman, J, Puetz, P., Weinreb, S., Kuiper, T., Kooi, J., Jones, G., Bardin, J., Mani, H., Lichtenberger, A., Cecil, T., Hedden, A., Narayanan, G. *SuperCam: a 64 pixel heterodyne imaging spectrometer*, Proc. SPIE v. 7020, 2008.

Groppi, C.E., Walker, C.K., Kulesa, C., Golish, D., Hedden, A., Narayanan, G., Lichtenberger, A.W., Kooi, J. W., Graf, U.U., Heyminck, S. *First results from DesertSTAR: a 7-pixel 345-GHz heterodyne array receiver for the Heinrich Hertz Telescope*, Proc. SPIE, v. 5498, 2004.

Puetz, P., Hedden, A., Gensheimer, P., Golish, D., Groppi, C., Kulesa, K., Narayanan, G., Lichtenberger, A., Kooi, J., Wadefalk, N., Weinreb, S., Walker, C., *345 GHz Prototype SIS Mixer with Integrated MMIC LNA*, Int. J. Infrared Milli. Waves, 27, 1365, 2006.

Groppi, C., Walker, C, Jacobs, K & Graf, U., *Pole STAR: An 810 GHz Array Receiver for AST/RO*, Imaging at Radio through Submillimeter Wavelengths, ASP Conference Proceedings, v. 217, 2000.

Groppi, C.E., Hunter, T.R., Blundell, R., Sandell, G., *High Spatial Resolution Observations of Two Young Protostars in the R Corona Australis Region*, Ap.J., 670, 489, 2007.

Additional Publications:

Groppi, C., Walker, C., Kulesa, C., Golish, D., Hedden, A., Gensheimer, P., Narayanan, G., Lichtenberger, A., Graf, U., Heyminck, S., *DesertSTAR: a 7 pixel 345 GHz Heterodyne Array Receiver for the Heinrich Hertz Telescope*, Proc. SPIE, v. 4855, 2003.

Groppi, C., Walker, C., Drouet d' Aubigny, C., Golish, D., Kulesa, C., Hedden, A., Lichtenberger, A., Datesman, A., Kooi, J., *SuperCam, A 10x10 Superheterodyne Camera Concept*, 9th International Conference on Terahertz Electronics, 2001.

Walker, C., Groppi, C., Golish, D., Kulesa, C., Hungerford, A., Drouet d' Aubigny, C., Jacobs, K., Graf, U, Martin, C., Kooi, J., *POLE STAR: An 810 GHz Array Receiver for AST/RO*, Proceedings of the 12th International Symposium on Space Terahertz Technology, 2001.

Walker, C., Groppi, C., Drouet d' Aubigny, C., Chen, G., Schieder, R., Narayanan, G., Lichtenberger, A., Siegel, P., *Far-infrared array receiver (FAR) for SOFIA*, Proc. SPIE, v. 4014, 2000.

Narayanan, D., Walker, C., Groppi, C. *Warm-Dense Molecular Gas in the ISM of Starbursts, LIRGs and ULIRGs* Astrophysical Journal, v. 630, pp. 269, 2005.

Synergistic Activities:

- Involvement in all facets of the design, construction, test and integration of four heterodyne array receivers (PoleSTAR, DesertSTAR, SuperCam, Stratospheric Terahertz Observatory) .
- Full wave electromagnetic simulation of sub-mm wave and THz receiver components, including mixers, feed-horns and ortho-mode transducers (OMTs).
- Development of sub-mm wave and terahertz waveguide and quasi-optical components for low noise receiver systems.
- Atmospheric remote sensing using active millimeter and terahertz systems.
- Star formation research using mm-wave and sub-mm wave telescopes, concentrating on the interaction of protostellar sources with the surrounding ISM, and the dynamics of protostellar accretion disks.

Collaborators and co-editors:

Pietro Bernasconi, Johns Hopkins Applied Physics Laboratory
Willy Bertiger, NASA Jet Propulsion Laboratory
Raymond Blundell, Harvard-Smithsonian Center for Astrophysics
Christian Drouet d'Aubigny, University of Arizona
Paul Goldsmith, NASA Jet Propulsion Laboratory
Urs Graf, Universitat zu Koeln
Abby Hedden, Harvard-Smithsonian Center for Astrophysics
David Hollenbach, NASA Ames Research Center
Jonathan Kawamura, NASA Jet Propulsion Laboratory
Jacob Kooi, California Institute of Technology
Craig Kulesa, University of Arizona
E. Robert Kursinski, University of Arizona
William Langer, NASA Jet Propulsion Laboratory
Carey Lisse, Johns Hopkins University
Arthur Lichtenberger, University of Virginia
Christopher Martin, Oberlin University
Imran Mehdi, NASA Jet Propulsion Laboratory
Gopal Narayanan, University of Massachusetts
Alessandro Navarrini, University of California at Berkeley
Herb Pickett, NASA Jet Propulsion Laboratory
Patrick Puetz, Universitat zu Koeln
Goran Sandell, NASA Ames
Michael Schein, University of Arizona
Anders Skalare, NASA Jet Propulsion Laboratory
Jeffrey Stern, NASA Jet Propulsion Laboratory
Christopher Walker, University of Arizona
Dale Ward, University of Arizona
Sander Weinreb, NASA JPL
Mark Wolfire, University of Maryland

Graduate and Postdoctoral Advisors:

Christopher K. Walker, Ph.D. Advisor, University of Arizona
John Payne, Postdoctoral Advisor, National Radio Astronomy Observatory
Christopher K. Walker, Postdoctoral Advisor, University of Arizona