

# Curriculum Vitae

## German Cortes-Medellin

526 Space Sciences Building, Cornell University, Ithaca, NY 14853

Phone: (607) 227-9440, E-mail: gc76@cornell.edu

### (a) Professional Preparation:

University of Massachusetts, Amherst, Massachusetts	Electrical and Computer Eng.	Ph.D.	1993
Universidad De Los Andes, Bogotá, Colombia	Electrical Engineering	M.Sc.	1986
Universidad De Los Andes, Bogotá, Colombia	Physics	B.Sc.	1984
Universidad De Los Andes, Bogotá, Colombia	Electrical Engineering	B.Sc.	1983

### (b) Appointments:

*Cornell University:* Senior Research Associate at National Astronomy and Ionosphere Center, at Cornell University, Ithaca, NY, Oct 2000 to 2011, Currently at the Center for Radiophysics and Space Research, Cornell University.

*Vertex Antenna Systems:* Senior Microwave Engineer at Vertex Antenna Systems, LLC, Santa Clara, CA, October 1998 to October 2000.

*Universidad De Los Andes:* Full time Assistant Professor and Research Engineer, at the Department of Electrical and Electronics Engineering, University of Los Andes, Santa Fé de Bogotá, Colombia, from January 1994 to September 1998.

*FCRAO:* Post Doctoral position as Research Engineer at the Five College Radio Astronomy Observatory at Amherst, Massachusetts, June to December 1993.

### (c) Relevant Publications:

-G. Cortes-Medellin, S. Parshley, A. Vishwas, D. B. Campbell. "Fully Cryogenic Phased array Prototype Camera for the Arecibo Radio Telescope". Accepted for presentation at *SPIE International Symposium on Astronomical Instrumentation*. Montreal, June of 2014

-J. Wheeler, P. Maloney, S. Brugger, J. Glenn, B. Koopman, M. Niemack, G. Cortes-Medellin, S. Parshley, G. Stacey, D. Dowell, C. McKenney, S. Golwala, "Antireflection Coatings for Submillimeter Silicon Lenses". Accepted for presentation at *SPIE International Symposium on Astronomical Instrumentation*. Montreal, June of 2014.

-G. E. Lacy, M. Fleming, L. Baker, W. Imbriale, G. Cortes-Medellin, B. Veidt, G. J. Hovey, and D. DeBoer, "An Update on the Mechanical and EM Performance of the Composite Dish Verification Antenna (DVA-1) for the SKA", *International Conference on Electromagnetics in Advanced Applications*, Cape Town, South Africa, Sep 2012.

-W. A. Imbriale, L. Baker and G. Cortes-Medellin, "Optics Design For The U.S. SKA Technology Development Project Design Verification Antenna", *European Conference on Antennas and Propagation*, Prague, Czech Republic, 26-30 March 2012.

-G. Cortes-Medellin and Donald B. Campbell, "Arecibo Focal Phased Array: Feasibility Study And Instrument Concept Design", *XXX<sup>th</sup> URSI General Assembly and Scientific Symposium*, Istanbul, Turkey, August 2011.

-G. Cortes-Medellin et al., "Field of View Characterization of Arecibo Radio Telescope with a Phased Array Feed", *IEEE AP-S International Symposium*, Spokane, WA, USA, July 2011.

-G. Cortes-Medellin, "Non-Planar Quasi-Self-Complementary Ultra-Wideband Feed Antenna". *IEEE Transactions on Antennas and Propagation*, Vol. 59, No. 6, Part I, pp. 1935-1944, June 2011.

-S. Padin, M. Hollister, S. Radford, J. Sayers, D. Woody, J. Zmuidzinis, G. Cortes-Medellin, T. Sebring, G. Stacey, "CCAT Optics", *SPIE International Symposium on Astronomical Instrumentation*, San Diego, CA June 2010.

-German Cortes-Medellin and Terry Herter, "Optical Design of CCAT", *SPIE International Symposium on Astronomical Instrumentation*. Orlando, Florida, May of 2006.

-G. Cortes-Medellin, "Active Surface Segmentation Analysis of CCAT", *SPIE International Symposium on Astronomical Instrumentation*, Orlando, Florida, May 2006.

-G. Cortes-Medellin. "Low Frequency End Performance of a Symmetrical Configuration Antenna for the Square Kilometer Array SKA". *Experimental Astronomy, Springer*, 17:111-118, 2005.

-G. Cortes-Medellin and Paul F. Goldsmith, "Analysis of Active Surface Reflector Antenna for a Large Millimeter Wave Radio Telescope", *IEEE Transactions on Antennas and Propagation*, Vol. 42, No. 2, Feb 1994.