

# Glen I. Langston

## **Present Position:**

Scientist supporting Commissioning of the 100m Diameter Green Bank Telescope  
Project Scientist for Satellite Tracking at the National Radio Astronomy Observatory (NRAO)  
Green Bank, WV 24944  
phone: (304) 456-2224 FAX: (304) 456-2170  
email: glangsto@nrao.edu

## **Relevant Experience:**

Project Scientist and Manager for NRAO's Orbiting VLBI station. Former Project Manager for AIPS software package. Former Project Manager for Space Shuttle Dynamic Integrated test. Co-Discoverer of first Einstein Ring Gravitational Lenses. Massachusetts Institute of Technology Gravitational Lens search group.

## **Professional Memberships:**

American Astronomical Society, International Astronomical Union, COSPAR

## **Education:**

9/1983-9/1987: Ph.D. in Physics, Massachusetts Institute of Technology (MIT)  
9/1975-6/1981: Dual B.S. in Electrical Engineering and Physics, Physics, MIT  
9/1979-1/1980: Institute of European Studies, Freiburg, FRG  
9/1971-6/1975: Bryan High School, Bryan Ohio

## **Professional Employment:**

3/2002-Present: Scientific Researcher for the 100m Green Bank Telescope (GBT)  
6/1994-3/2002: Space VLBI Manager and Project Scientist, NRAO  
9/1998-3/1999: Visiting Professor, University of Tokyo, Sagamihara Japan.  
9/1993-9/1996: Research Professor, University of Virginia, Charlottesville, VA  
9/1989-9/1994: Assistant Scientist, National Radio Astronomy Observatory  
9/1988-9/1989: Postdoctoral Fellow, Naval Research Laboratory, Washington, D. C.  
9/1987-9/1988: Postdoctoral Fellow, Max Planck Institute for Radio Astronomy, Bonn, FRG  
9/1987-9/1988: Assistant Professor of Computer Science, University of Maryland, Bonn, FRG  
9/1981-9/1984: Consultant for Oil Exploration Software. Intermetrics Inc. Cambridge, Ma.  
6/1979-9/1981: Group leader, Space Shuttle Software Tests. Intermetrics Inc. Cambridge, Ma.

## **Refereed Publications:**

*A SEARCH FOR MgNC and AINC in TMC-1: THE STATUS OF METALS IN DARK CLOUD CORES*; Turner, Dunbar, Petrie and Langston (2004), *Astrophysical Journal*, submitted.

*MICROWAVE ISM EMISSION IN THE GREEN BANK GALACTIC PLANE SURVEY*; Finkbeiner, Langston, and Minter (2003), *Astrophysical Journal*,  
submitted, [http://www.astro.princeton.edu/~dfink/spin/langston\\_dust.ps](http://www.astro.princeton.edu/~dfink/spin/langston_dust.ps)).

*G28.17+0.05: AN UNUSUAL GIANT H I CLOUD IN THE INNER GALAXY*; Minter, Lockman, Langston, Lockman (2001) *Astrophysical Journal*, **555**, 868.

- THE VSOP 5 GHZ AGN SURVEY I. COMPILATION AND OBSERVATIONS*; Hirabayashi, ... Langston ... (2000) *PASJ*, **52**, 997.
- THE VLBI SPACE OBSERVATORY PROGRAMME AND THE RADIO-ASTRONOMICAL SATELLITE HALCA*; Hirabayashi, ... Langston ... (2000) *PASJ*, **52**, 955.
- THE FIRST GALACTIC PLANE SURVEY AT 8.35 and 14.35 GHZ*; Langston, G., Minter, A., D'Addario, L., Eberhardt, K., Koski, K., Zuber J. (2000) *Astronomical Journal*, **119**, 2801.
- HALCA IMAGES OF YOUNG RADIO SOURCE 1413+135*; Langston, G. , Minter, A. H., Ghigo, F. (2000) *COSPAR Adv. Space Res.*, **26**, 701.
- OVERVIEW AND INITIAL RESULTS OF THE VERY LONG BASELINE INTERFEROMETRY SPACE OBSERVATORY PROGRAMME*; Hirabayashi, ... Langston, G. I. *et al.* (1998) *Science*, **281**, 1825
- 8.35 AND 14.35 GHZ CONTINUUM OBSERVATIONS OF COMET HYAKUTAKE C/1996 B2*; Minter, Anthony H, and Langston, G. (1996), *Ap. J.* **467**, L37.
- THE LENSING GALAXY IN MG1549+307*; Lehar, J., Cooke, A., Lawrence, C., Silber, A., Langston G. (1996) *A.J.*, **111**, 1812.
- THE GRAVITATIONALLY LENSED RING IN MG1549+307*; J. Lehar, G. Langston, A. Silber, C. Lawrence, and B. Burke (1993), *A. J.* **105**, 847.
- THE FOURTH MIT-GREEN BANK 5 GHZ SURVEY*; Griffith, Mark, ... Langston, Glen *et al.* (1991), *Ap. J. Suppl.*, **75**, 801.
- INFRARED K-BAND OBSERVATIONS OF THE GRAVITATIONAL LENS 2016+112*; G. Langston *et al.* (1991), *A. J.*, **102**, 1253.
- FAINT RADIO SOURCES AND GRAVITATIONAL LENSING*; G. Langston *et al.* (1990), *Ap. J.*, **353**, 34.
- GALAXY MASS DEDUCED FROM THE STRUCTURE OF EINSTEIN RING MG1654+1346*; G. Langston *et al.* (1990), *Nature*, **344**, 43, **Featured on Cover**.
- THE THIRD MIT-GREEN BANK 5 GHZ SURVEY*; Griffith, Mark, Langston, Glen *et al.* (1990), *Ap. J. Suppl.*, **74**, 129.
- THE SECOND MIT-GREEN BANK 5 GHZ SURVEY*; G. Langston, *et al.* (1990), *Ap. J. Suppl.*, **72**, 621.
- MG1654+1346: EINSTEIN RING GRAVITATIONAL LENS OF A RADIO LOBE*; G. Langston, D. Schneider, S. Conner, J. Lehar, C. Carilli, B. Burke, J. Hewitt, E. Turner and M. Schmidt (1989), *A. J.*, **97**, 1283.
- UNUSUAL RADIO SOURCE MG1131+0456: A POSSIBLE EINSTEIN RING*; J. Hewitt, E. Turner, D. Schneider B. Burke, G. Langston and C. Lawrence (1988) *Nature*, **333**:537.

### **Books:**

- Highly Redshifted Radio Lines*; *Astronomical Society of the Pacific, Vol 159* (1999) Carilli, C. L.; Radford, S. J. E.; Menten, K. M.; Langston, G. I. Editors.

*Properties of Extragalactic Radio Sources Detected in the MG 5 GHZ Survey.; MIT PHD Thesis, (1987)*  
Langston, G. I.

**Recent Conference Presentations:**

*Molecular Line Studies with the Green Bank Telescope; Langston, 59th Ohio State Molecular Spectroscopy conference, 2004 June*

*Streams of Neutral Hydrogen in the M81 Group of Galaxies; Rubin, Langston and Walter, AAS 2004 January*

*Searches for High Redshift Neutral Hydrogen and Radio Frequency Interference; Langston, Ghigo and Acree, AAS 2004 January*

*Galactic Microwave Emission from Spinning Dust: The Green Bank Galactic Plane Survey; Finkbeiner, Langston, and Minter, AAS. 2003 January*

*A Search for Cyclotron Emission from known Extra-Solar Planets; Langston, Orban, and Bastian, AAS. 2002 January*

*Transient Radio Sources in the Galactic Center; Freismuth, Langston, Minter, AAS 2002 June*

*Faint Radio Sources and Gamma Ray Bursts; Langston, Minter, and Freismuth, AAS 2002 June*

*Motion of Components of PKS 1413+135 from Space VLBI observations; Langston, Minter, Ghigo, Avruch, Perlman, AAS 2001 January*

---

Glen I. Langston

---

Date