

## E.a/b. CURRICULUM VITÆ

Donald C. Backer

- Birth:** 1943 November 9 – Plainfield, NJ, USA
- Education:** B.S.E.P., Cornell University, 1966  
M.Sc., University of Manchester, 1968 (advisor: H. P. Palmer)  
Ph.D., Cornell University, 1971 (advisor: F. D. Drake)
- Position:** Professor, Department of Astronomy, 1989-present  
Research Astronomer, Radio Astronomy Laboratory, 1975–present  
Acting Chair/Vice Chair, Department of Astronomy, 1998/1999-
- Address:** Astronomy Department  
601 Campbell Hall  
University of California  
Berkeley 94720-3411  
dbacker@astro.berkeley.edu  
<http://astro.berkeley.edu/~dbacker>  
510-642-5128 (phone) 510-642-3411 (fax)
- Memberships:** American Astronomical Society (AAS)  
International Scientific Radio Union (URSI)  
International Astronomical Union (IAU)

## E.c. LIST OF RECENT PUBLICATIONS

D. C. Backer & S. Sallmen “Polarimetry, Peculiar Mode and X-Ray Alignment of PSR B1821-24” 1997, *A. J.*, **114**, 1539-43.

D. C. Backer, M. R. Dexter, *et al.* “A Programmable 36-MHz Digital Filter for Radio Science” 1997, *PASP*, **109**, 61-68.

M. Kramer, K. M. Xilouris, F. Camilo, D. Nice, D. C. Backer, C. Lange, D. R. Lorimer, O. Doroshenko, & S. Sallmen “Profile Instabilities of the Millisecond Pulsar PSR J1022+1001” 1999, *Ap. J.*, **520**, 323-34.

J. M. Weisberg *et al.* & D. C. Backer “Arecibo 1418 MHz Polarimetry of 98 Pulsars: Full Stokes Profiles and Morphological Classifications” 1999, *Ap. J. Suppl.*, **121**, 171-217.

C. Lange, F. Camilo, N. Wex, M. Kramer, D.C. Backer, A.G. Lyne and O. Doroshenko “Precision Timing Measurements of PSR J1012+5307” 2000 MNRAS, submitted

---

D. C. Backer “The Neutron Star–Helium White Dwarf Population in the Galactic Disk” 1998, *Ap. J.*, **493**, 873-78.

D. C. Backer & R. A. Sramek “Proper Motion of the Compact, Nonthermal Radio Source in the Galactic Center, Sagittarius A\*” 1999, *Ap. J.*, **524**, 0-0.

G. C. Bower, H. Falcke, & D. C. Backer “Detection of Circular Polarization in the Galactic Center Black Hole Candidate, Sagittarius A\*” 1999, *Ap. J.*, **523**, L29-32.

A. N. Lommen, A. Zepka, D. C. Backer, M. McLaughlin, J. M. Cordes, Z. Arzoumanian, & K. Xilouris “New Pulsars from Arecibo Drift Scan Search” 2000 *Ap. J.*, in press

D.C. Backer & B.D.G. Chandran “Anisotropic Diffractive Scintillation of Pulsars – A Probe of MHD Turbulence in the Interstellar Medium” 2000 *Ap. J.*, submitted

### **E.d. SYNERGISTIC ACTIVITIES**

#### **Recent Professional Service Activities:**

NRAO User’s Committee, 1995–1997; Chair 1997

URSI/USNC Commission J, Chair 1997-1999

NAIC Visiting Committee, 1999-2001

NRAO Program Advisory Committee, 1999-

#### **Meetings (co-)organized:**

URSI GA 1993 August, Kyoto; Joint J/A Session on “Pulsar Timing”

Aspen Winter Astrophysics Conference on “Millisecond Pulsars : A Decade of Surprise”, 1994 January; with M. Tavani & A. Fruchter

Texas Symposium, 1996 Chicago : Pulsar Session

URSI/USNC Commission J, 1997 Montreal; 1998, 1999 Boulder

Work–Shop on Pulsar Instrumentation: 1998 Dec & Jan, Berkeley

### **E.e. COLLABORATORS, STUDENTS, ADVISORS**

My principal US collaborators over the past 4 y have been: S. Anderson, G. Bower, B. Chandran, J. Cordes, H. Falcke, R. Fisher, A. Jaffe, A. Lyne, M. Kramer, T. Hankins, S. Kulkarni, A. Rogers, D. Sramek

Graduate students past & present: Aaron Bernstein, Geoffrey Bower, Hui-Re Chen, Andrea Lommen, Shauna Sallmen, and Tony Wong.

Postdocs: A. Fruchter & A. Zepka.

Long term visitors: M. Kramer, Otto Hahn Fellowship (1997-1998)

My graduate supervisors were M. Sc. – H. P. Palmer (Manchester; dec.), and Ph. D. – F. D. Drake (Cornell). My postdoctoral supervisors were D. S. Heeschen (NRAO) and T. A. Clark (NASA/GSFC).