

Population Statistics Study of radio and γ -ray pulsars



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Education and experiences
 Post-doc., Nuclear Physics, Max-Planck-Institut für Kernphysik, Heidelberg, Germany (1980-1981). Ph.D., Nuclear Chemistry, Texas A&M University (1980)
 Hope College: Professor (1999-), Affiliate Director –Michigan Space Grant Consortium (1994-), Associate Professor (1989-1999)
 Texas A&M University, Cyclotron Institute, Visiting Research Scientist (1995-1996)

Areas of expertise
 Astrophysics - radio and gamma-ray emission from pulsars. Relativistic Compton scattering in strong magnetic fields

Grants and awards
 NSF-REU – Radio and high-energy emission from pulsars at Hope College (6/1/2003-5/31/2007) (\$129,017 with a two year unfunded extension)
 Research Corporation – Radio and high-energy emission from neutron stars at Hope College (6/1/2003-5/31/2005)(\$32,129)
 NASA Astrophysics Theory Program – High-energy radiation from isolated neutron stars at Hope College (\$341,147)(10/1/2005-9/31/2008)

Key publications and presentations

- Matthew G. Bering, Peter L. Gonthier, and Alice K. Harding, “*Spin-Dependent Cyclotron Decay Rates in Strong Magnetic Fields*”, ApJ, 630,430 (2005)
- P.L. Gonthier, R. Van Guilder, A.K. Harding, I.A. Grenier and C.A. Perrot, “*Radio loud and radio-quiet, gamma-ray pulsars from the Galaxy and the Gould Belt*”, Astrophysics and Space Science, 297,71 (2005)
- Peter L. Gonthier, Robert Van Guilder and Alice K. Harding, “*The role of beam geometry in population statistics and pulse profiles of radio and-ray pulsars*”, ApJ, 604,775, (2004)
- P. L. Gonthier, M. S. Ouellette, J. Berrier, S. O’Brien and A. K. Harding, “*Galactic Populations of Radio and Gamma-Ray Pulsars in the Polar Cap Model*”, ApJ, 565, 482, (2002)

