

**Glenn Horton-Smith**

Associate Professor of Physics  
Department of Physics  
Kansas State University  
116 Cardwell Hall  
Manhattan, KS 66506

Telephone: (785) 532-6476  
Fax: (785) 532-6787  
E-mail: [gahs@ksu.edu](mailto:gahs@ksu.edu)

**Professional Preparation:**

Undergraduate:	California Institute of Technology	B.S., physics, 1989
Graduate:	Stanford University	Ph.D., physics, 1998
Postdoctoral:	Tohoku University	1998-2000
	California Institute of Technology	2000-2004

**Appointments:**

Assistant Professor	Kansas State University	2004-2010
Senior Scientist	Institute for the Physics and Mathematics of the Universe	2008-
Associate Professor	Kansas State University	2010-

**Five publications relevant to current research:**

1. "Study of the Production of Radioactive Isotopes through Cosmic Muon Spallation in KamLAND", S. Abe *et al.* [KamLAND Collaboration], Phys. Rev. C 81, 025807 (2010).
2. "Precision Measurement of Neutrino Oscillation Parameters with KamLAND", S. Abe *et al.* [KamLAND Collaboration], Phys. Rev. Lett. 100, 221803 (2008).
3. "Muon simulations for Super-Kamiokande, KamLAND and CHOOZ", A. Tang, G. Horton-Smith, V. A. Kudryavtsev and A. Tonazzo, Phys. Rev. D 74, 053007 (2006).
4. "Systematic limits on  $\sin^2(2\theta_{13})$  in neutrino oscillation experiments with multi-reactors", H. Sugiyama, O. Yasuda, F. Suekane and G. A. Horton-Smith, Phys. Rev. D 73, 053008 (2006).
5. "A high sensitivity search for anti- $\nu_e$ 's from the sun and other sources at KamLAND", K. Eguchi *et al.* [KamLAND Collaboration], Phys. Rev. Lett. 92, 071301 (2004).

**Teaching, Mentoring, and Synergistic Activities in the last 3 years:**

- Courses taught in the last 3 years:
  - General Physics II (phys 114): Fall 2010.
  - Descriptive Astronomy (phys 191): Spring 2009 and 2010.
  - Particle Physics (phys 694): Spring 2008.
  - Mathematical Methods of Physics (phys 801): Fall 2008 and 2009.
- Physics demonstrations and talks for local gifted program 5<sup>th</sup> and 6<sup>th</sup> grade student campus visits, 2008.
- NSF Research Experience for Undergraduates (REU) program mentor, 2006-present.

- Presentation to 9<sup>th</sup> grade class at Junction City High School, in support of a former astronomy student and KSU Student Astronomy Club member and current student teacher, 2008.

### **Collaborations and Other Affiliations**

**Collaborations:** KamLAND (<http://kamland.lbl.gov>),  
Double Chooz (<http://doublechooz.in2p3.fr/>),  
MicroBooNE (<http://www-microboone.fnal.gov/>).

**Advisors:** **Post-doctoral:** Professor R.D. McKeown, California Institute of Technology, Pasadena, CA; Professor A. Suzuki, Tohoku University, Sendai, Japan.

**Ph.D.:** Professor D. Burke, Stanford Linear Accelerator Center, Menlo Park, CA.

**Advisees:** **Thesis advisor for 4 graduate students at Kansas State:** Jasmine Foster (2005-), Mark Smith (2005-2009), Deepak Shrestha (2007-), Pi-Jung Chang (2008-).

**Postdoctoral researchers:** Alfred Tang (2005-2007) and David McKee (2008-).

**Undergraduate researchers:** James Black III (2006), Richard Chevious (2007), James Hazelton (2007), Alan Winter (2007-2009), Jeremy Lund (2008), Jon Graves (2008), C. Alex George (2008), Rachel Houtz (2008), Valery Gray (2009), Ryan Schooley (2009), Cristian Gaidau (2010), Alex Yeagle (2010).