

Richard T. Jones, Associate Professor of Physics
University of Connecticut
Curriculum Vitæ

Updated: Sept. 30, 2009

Birthdate: Dec. 17, 1959
Birthplace: Sandy Point, Nova Scotia, Canada
Citizenship: Canadian, permanent U.S. resident

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Education:

Bob Jones University, Greenville, S.C.	Physics	B. Sc.	1981
Virginia Polytechnic Institute, Blacksburg VA	Physics	Ph. D.	1988
University of Illinois, Urbana IL	Nuclear Physics	postdoc	1988-1990

Appointments:

Scientific Associate, CERN, Geneva, Switzerland	1990-1992
Research Staff, CERN, Geneva, Switzerland	1992-1996
Assistant Professor, Department of Physics, University of Connecticut	1996-2002
Associate Professor, Department of Physics, University of Connecticut	2002-

Professional Societies:
member, American Physical Society

Honours and Distinctions:

graduated Summa Cum Laude with B.Sc.	1981
received a NATO grant for collaboration with University of Geissen	1985
received Cunningham dissertation fellowship	1986

Visiting professorships:
I.N.F.N. visiting professor, University of Genova, Italy 4/1996-7/1996

Field of research specialization:
Experimental Nuclear/Particle Physics

Students supervised on research projects:

High school students:	UConn Mentor Connection program	11
	Jefferson Lab summer projects	2
Undergraduate students:	UConn Honors program	4
	Independent study for credit	5
	Jefferson Lab summer projects	15
	Summer internships	2
	Research study abroad	1

Graduate students:	Jefferson Lab summer projects	6
	Computational physics projects	2
	Nuclear physics data analyses	2

Recent work produced with students:

1. "Prototype Scintillating Fiber Tagger Microscope Design and Construction" by I. Senderovich, C.R. Nettleton, and R.T. Jones, *GlueX-doc-1074*, June 20, 2008.
2. "Simulation of Light Propagation in Optical Fibers in the GlueX Tagger Microscope", J.Y. Yang, talk presented at UConn Mentor Connection capstone event, University of Connecticut, July 28, 2008.
3. "Design and Fabrication of a Prototype Scintillating Fiber Tagger Microscope for the GlueX Experiment", I. Senderovich, C.R. Nettleton, M. Underwood, and R.T. Jones, *GlueX-doc-1125*, September 20, 2008.
4. "Analysis of Michelson Interference Images made with Diamond Wafers", A.C. Engsborg, R.T. Jones, poster presentation at 19th Annual Argonne Symposium for Undergraduates in Science, Engineering and Mathematics, November 7-8, 2008.
5. "Design of Electronics for a High Energy Photon Tagger", M. Underwood, R.T. Jones, poster presented to the UConn Frontiers in Undergraduate Research, April 17-18, 2009.
6. "Engineering Design of a Photon Tagging Detector for GlueX", S. Lamb, R.T. Jones, poster presented to the UConn Frontiers in Undergraduate Research, April 17-18, 2009.
7. "Diamond Bremsstrahlung Radiator Assessment using X-ray Topography at CHESS", R.T. Jones, I. Senderovich, K. Finkelstein, F. Klein, and P. Nadel-Turonski, presentation at CHESS Annual User's Meeting, Ithaca, NY, June 10, 2009.
8. "Probing the Forces between Quarks with Photons", R. Roussel, D. Smith, A. Antoniou, talk presented at UConn Mentor Connection capstone event, University of Connecticut, July 31, 2009.

Present research projects:

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|---------------------------------|--------------------------|--------------------|
| 1. GlueX (part of JLab Upgrade) | current status: approved | involvement: 1997- |
| 2. Qweak (JLab E02-020) | current status: approved | involvement: 2000- |

Selected publications:

1. "Rocking Curve Imaging for Diamond Radiator Crystal Selection", G. Yang, R.T. Jones, F. Klein, K. Finkelstein, K. Livingston, 20th Conference on Diamond and Related Materials, Athens, Greece, Sept. 6-10, 2009, to be published by Elsevier.
2. "Experimental study of photon beam polarimetry based on nuclear e^+e^- pair production in an amorphous target", F. Adamyan, A. Aganyants, H. Hakobyan, J. Manukyan, R. Oganezov, L. Sargsyan, A. Sirunyan, H. Vartapetian, and R.T. Jones, **Nucl. Instr. Meth. A** 579, (2007) 973.
3. "Polarimetry of coherent bremsstrahlung by analysis of the photon energy spectrum", S. Darbinyan, H. Hakobyan, R.T. Jones, A. Sirunian, and H. Vartapetian, , **Nucl. Instr. Meth. A** 554 (2005) 75.
4. "A Photon Beam Polarimeter based on Nuclear e^+e^- Pair Production in an Amorphous Target", F. Adamyan, H. Hakobyan, R.T. Jones, Zu Manukyan, A. Sirunian, H. Vartapetian, **Nucl. Instr. Meth. A** 546 (2005) 376.
5. "The Selection and Performance of Diamond Radiators used in Coherent Bremsstrahlung Experiments", J.D. Kellie, P.J.M. Clive, G.L. Yang, R. Beck, C. Gordon, C. Hall, J.W. Harris, R.T. Jones, D. Laundry, K. Livingston, I.J.D. MacGregor, J.C McGeorge, J. Malone, A. Schmidt, P.A. Slaven, R.M. Vrcelj, D. Watts, **Nucl. Instr. Meth. A** 545 (2005) 164.