

Igor Senderovich

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- EDUCATION **University of Connecticut**, Storrs, CT
Ph.D. in Physics, August 2012
M.S. in Physics
- Cornell University, College of Arts and Sciences**, Ithaca, NY
B.A. in Physics, May 2005
- Stuyvesant High School**, New York, NY
- RESEARCH EXPERIENCE **Meson Physics Group, Arizona State University**, Tempe, AZ/Newport News, VA
Postdoctoral Research Associate **Sep 2012 - present**
Analysis of η photo-production on the proton in the Jefferson Lab Hall-B FROST double-polarization experiments to extract E and G polarization observables
- Experimental Nuclear Physics Group, University of Connecticut**
Research Assistant **Jul 2006 - Aug 2012**
 - Developed instrumentation for the Hall-D/GlueX experiment at Jefferson Lab: a high-resolution tagger hodoscope, photon beam-position monitor and coherent bremsstrahlung radiator
 - Performed an Amplitude Analysis on a simulated $\gamma p \rightarrow X p \rightarrow b_1 \pi p$ channel
- Laboratory for Elementary-Particle Physics, Cornell University**
Student Research Assistant **Feb 2004 - Aug 2005**
Developed and employed Multiobjective Evolutionary algorithms to optimize the ERL photoinjector. Researched the optimal geometry of a photo-emission electron gun.
- Technion - Israel Institute of Technology**
SciTech 2000 Research Intern **Jul - Aug 2000**
Simulated maneuvers of a scaled-down F-16 jet at high angle of attack and sideslip.
- TEACHING EXPERIENCE **Physics Department, University of Connecticut**
Teaching Assistant **Sep 2007 - Dec 2008**
Instructed “Intermediate Laboratory” and “Electronics for Scientists” courses intended for upper-class students.
- Assistant Instructor* **Jul 2007**
Helped guide elementary school children through Kids Are Scientists Too (KAST) program - a hands-on workshop in basic physics principles and applications.

Teaching Assistant: **Sep 2005 - May 2006**
Tutored students at the Physics Learning Resource Center (PLRC)

Teaching Assistant **Sep 2005 - May 2006**
Instructed "Introductory Mechanics" laboratory courses of different levels as well as a laboratory course on astronomy.

Tutor.com

Physics Tutor **Jan 2010 - Aug 2011**
Tutored students ranging from primary school to college level in physics via an online multimedia system.

Quantitative Learning Center, University of Connecticut

Teaching Assistant **Sep 2006 - Dec 2006**
Coordinated the work at the Center and tutored student in physics and mathematics.

Counseling Program for Intercollegiate Athletes, University of Connecticut

Tutor **Sep 2005 - May 2006**
Tutored physics to students from athletic teams.

Private Tutoring **Mar 2005 - Aug 2011**
Tutored physics and mathematics privately with levels ranging from high school to intermediate college level.

OTHER WORK EXPERIENCE

Department of Statistics, University of Connecticut

System Administrator **Sept 2008 - May 2012**
Assisted in maintenance of a beowulf cluster for high performance computing and provided support to its users.

Cornell IT (Distributed Learning Department), Cornell University

Language Learning Content Developer **Jun 2003 - May 2004**
Assisted in upgrade of a language learning course: remastered old audio recordings using various spectral analysis techniques, provided programming and web design for content migration.

Batt Laboratory, Food Science Department, Cornell University

Network Administrator **September 2001 - May 2005**
Provided general system administration and website support.

REMO Drug Corporation, Brooklyn, NY

IT Assistant **Summers 2000-2001**
Developed a network for a new warehouse facility, including work on the wire plant, software and security as well as general system administration and user support.

PUBLICATIONS

Conference Proceedings

I. Bazarov, I. Senderovich, C. Sinclair, "Multiobjective Optimization of High Current High Brightness Injector", the Proceedings of 2005 Particle Accelerator Conference,

Knoxville, TN

I. Senderovich, "Search for Gluonic Excitations in Hadrons with GlueX", Proceedings of the XIV International Conference on Hadron Spectroscopy, edited by B. Grube, S. Paul, and N. Brambilla, eConf C110613 (2011).

PRESENTATIONS

I. Senderovich, *Colloquium*: "Exotic Mesons: Measurement Techniques, Recent Evidence and Future Searches", Catholic University of America, Washington, DC

I. Senderovich, *Invited Talk*: "The Search for Gluonic Excitations in Light Mesons with the GlueX Experiment", Seminar at CPHT, École Polytechnique, Palaiseau, France

I. Senderovich, "Search for Gluonic Excitations in Hadrons with GlueX", XIV International Conference on Hadron Spectroscopy (Hadron2011), Munich, Germany

I. Senderovich, "Tagger Microscope for Hall D", Department of Energy Hall D Tagger & Beamline Design and Safety Review, Newport News, VA

R. Jones, I. Senderovich, C. Nettleton, "A Novel Design of a High-Resolution Hodoscope for the Hall D Tagger based on Scintillating Fibers", APS 2008 Meeting of the Division of Nuclear Physics, Oakland, CA

Reports at GlueX collaboration meetings on detector development and Monte Carlo physics analysis

TECHNICAL EXPERIENCE

Computing Frameworks: Windows and Unix-like systems; parallelization on the Open Science Grid (OSG), multi-threading, OpenMP, GPUs,
Programming: C/C++, VHDL, Ruby, awk, bash, csh, Perl, Python, Matlab M-file, XML, VBScript
Analysis: ROOT, Matlab/Octave, Mathematica, R, STATA, Photo & Audio signal processing
Software Packages: LabView, TurboCAD, Xilinx ISE, Altium, LANL Poisson and Parmela, ASTRA
Publication Packages: HTML, CSS, LaTeX, MS Office/OpenOffice Products
Hardware: RF and digital electronics, PCB and FPGA core design
Communication: scientific/technical writing and reporting, grant writing

HONORS AND FELLOWSHIPS

$\Phi K \Phi$ Membership **inducted Spring 2009**
 $\Sigma \Pi \Sigma$ Membership **inducted Spring 2006**
Charles A. Reynolds Fellowship **Spring 2006**
Cornell University, College of Arts and Sciences Dean's List **Spring 2005**
Hampton University Graduate Studies (HUGS) Summer School **June 2006**

LANGUAGES

Fluent in English and Russian, qualification in German