

July 18, 2012

## CURRICULUM VITAE

Stephen Grenfell Peggs

Born in Manchester, England. Dual UK and U.S. citizenship.

<b><u>Education</u></b>	Oxford University	BA 1973	Physics
	Cornell University	PhD 1981	Accelerator Physics

Deputy Head of the Accelerator Division of the European Spallation Source.

Tenured physicist at Brookhaven National Laboratory.

Visiting Professor at the University of Manchester.

Adjunct Professor at Stony Brook University.

Fellow of the American Physical Society.

### Current research activities

Design of the European Spallation Source (ESS).

Accelerator Driven Sub-critical thorium Reactors (ADSR).

Development and implementation of the BNL ion Rapid Cycling Medical Synchrotron (iRCMS).

### Current and recent committees

Member of the International Advisory Committee for RISP (2012 - ).

Co-chair of the Thorium Energy Amplifier Association (ThorEA), UK (2010 - 2012).

Chair of the MICE Project Board, STFC, UK (2009 - ).

Chair of the Accelerator Systems sub-committee, DOE Lehman reviews of FRIB, U.S. (2009 - ).

Chair of the Accelerator Physics sub-committee, DOE Lehman reviews of SNS, U.S. (1997 - 2006).

### Students graduated

**PhD:** T. Satogata (Northwestern), C. Tang (SBU), J. Cardona (SBU), R. Calaga (SBU), R. Fliller (SBU), U. Iriso (Barcelona). **MS:** A. Warner (SBU).

**Publication list** Available at <http://dl.dropbox.com/u/24187786/papers/index.html>

## CAREER HISTORY

**September 2009 - present**

**Deputy Head of the Accelerator Division, ESS**

Currently on secondment from BNL to the European Spallation Source, a ~€1.5 billion project funded by a consortium of 17 European nations. The 5 MW superconducting proton linac will first deliver 2.5 GeV protons to a spallation target in Lund, Sweden, in 2018. The current "Design Update" phase will culminate in the delivery of a Technical Design Report, in December 2012.

**August 2008 - August 2009**

**Sabbatical from BNL at CERN**

While at CERN to participate in LHC commissioning and in the UA9 crystal collimation experiment, I became primarily involved in ESS conceptual design and in Thorium Energy Amplifier studies.

**September 2004 - July 2008**

**LARP Program Leader, BNL/FNAL**

Lead the U.S. LHC Accelerator Research Program, on a joint BNL/FNAL appointment. Four U.S. laboratories – BNL, FNAL, LBNL and SLAC – had an annual budget of ~\$13 million.

**October 1999 - August 2004**

**Assoc. Head, Collider-Accelerator Division, BNL**

C-AD was responsible for all hadron accelerators at BNL. Lead the BNL-industrial consortium that wrote the Technical Design Report for the Rapid Cycling Medical Synchrotron, with a U.S. patent awarded in 2008. Lead the beam dynamics efforts within the U.S. LHC Construction Project.

**September 1992 - September 1999** **Head, RHIC Project Accelerator Physics Group**

The AP group developed the RHIC design, wrote and implemented high level controls software, and commissioned beam. I lead the commissioning team that established first circulating beam in RHIC.

**October 1989 - August 1992**

**Head, FNAL Accelerator Physics Department**

Activities included development of the Main Injector lattice and layout, theoretical and experimental nonlinear dynamics in the E-778 collaboration, and controls software and database development.

**November 1984 - September 1989** **Accelerator Physicist, SSC Central Design Group**

At LBL I contributed extensively on diverse accelerator design aspects of the Superconducting Supercollider, many of them recorded in the 1986 Conceptual Design Report “Blue book”.

**March 1984 - November 1984**

**Research Associate, Cornell**

Helped to understand and optimize CESR after the separated orbit multi bunch mode upgrade.

**December 1981 - January 1984**

**CERN Fellow**

Worked on operational and theoretical aspects of the SPS proton-antiproton collider.

**January 1981 - November 1981**

**Postdoctoral Physicist, Cornell**

CESR development, after graduate student involvement in design, construction, and commissioning.