
Personal Info

Full Name	Sergey Senkin	Citizenship	Russian Federation
Date of Birth	January 5, 1988	Marital Status	Single

Contacts

Present Address	HH Wills Physics Laboratory, University of Bristol, Tyndall Avenue, Bristol BS8 1TL, UK
Mobile Phone	+44 (0) 7796 223597 (UK), +41 79 289 8398 (swiss)
Office Phone	+44 (0) 117 928 8724
Email	sergey.senkin@cern.ch
Homepage	http://cern.ch/senkin/

Education

2010 – present	PhD in Particle Physics , <i>University of Bristol (expected in late 2013).</i>
2004 – 2010	MSc/BSc in Applied Physics/Math , <i>Moscow Institute of Physics and Technology.</i>

Experience

Research

Autumn 2010 – present	PhD Student , <i>University of Bristol, Particle Physics Group, Bristol, UK.</i> Top quark mass and $t\bar{t}+X$ cross section measurement at CMS in lepton+jets channel
Autumn 2009 – Summer 2010	Research Assistant , <i>Joint Institute for Nuclear Research, CMS group, Dubna, Russia.</i> CMS muon High-Level Trigger efficiency studies
Autumn 2008 – Spring 2009	Research Assistant , <i>Texas A&M University, Department of Physics and Astronomy.</i> Search for the lightest NMSSM Higgs boson ($h_1 \rightarrow a_1 a_1 \rightarrow 4\mu$)
Summer 2007	Intern Student , <i>Fermi National Accelerator Laboratory, Batavia, IL, USA.</i> Tevatron turn-by-turn data fitting using MAD-X

Service work

Summer 2011 – Autumn 2012	Trigger Developer/Shifter , <i>CERN, LHC, CMS detector, Point 5, Cessy, France.</i> Top Trigger developer; ECAL Endcaps High-Voltage System on-call expert
November 2008	CSC Shifter , <i>CERN, LHC, CMS detector, Point 5, Cessy, France.</i> Cathode Strip Chambers subsystem maintenance

Teaching

Spring 2011, Spring 2013	Tutor , <i>University of Bristol, School of Physics.</i> Tutorials in Maths and Particle Physics for L1 and L3 students
Spring 2009	Teaching Assistant , <i>Texas A&M University, Department of Physics and Astronomy.</i> Tutorials and labs for freshman General Physics course
March 2005	Physics Grader , <i>National Physics Olympiad for high school students.</i>

Languages

English **Fluent**
Russian **Native**

TOEFL iBT score: 111 out of 120 (November 2009)

Computer Skills

OS	Linux/Unix, Mac OS X	programming	C/C++, python
scientific	CMSSW, Geant4, Mathematica	revision control	Git, SVN, CVS
IDE	Eclipse	typography	L ^A T _E X, OpenOffice
		other skills	GRID, ROOT, PyRoot, rootpy

Conference and Workshop Presentations

- 9 Apr 2013 *Measurement of MET, HT and other global distributions in top pair events*, IoP Conference, Liverpool, UK
- 8 Jan 2013 *Measurement of MET, HT and other global distributions in top pair events*, CMS UK Collaboration meeting, Abingdon, UK
- 14 Jun 2012 *Validation study of Particle Flow Jet Energy Corrections for top paths*, Trigger Studies Group meeting, CERN
- 15 May 2012 *Jets at High Level Trigger for top physics*, Top Quark PAG meeting, CERN
- 12 Dec 2011 *Using HitFit kinematic fitter in lepton+jets top mass analyses*, Workshop on kinematic fitting, CERN

Publications

- 2013 *Measurement of missing transverse energy in top pair events*, CMS Collaboration CMS-PAS-TOP-12-019, paper in preparation
- December 2012 *Measurement of the top-quark mass in $t\bar{t}$ events with lepton+jets final states in pp collisions at $\sqrt{s} = 7$ TeV*, CMS Collaboration arXiv:1209.2319, DOI:10.1007/JHEP12(2012)105, JHEP
- April 2010 *LHC discovery potential of the lightest NMSSM Higgs in $h_1 \rightarrow a_1 a_1 \rightarrow 4\mu$ channel*, with Alexander Belyaev, Jim Pivarski, Alexei Safonov and Aysen Tatarinov arXiv:1002.1956, DOI:10.1103/PhysRevD.81.075021, Phys. Rev. D

Additional Publications

- March 2013 *Search for the standard model Higgs boson produced in association with a top-quark pair in pp collisions at the LHC*, CMS Collaboration arXiv:1303.0763, submitted to JHEP
- March 2013 *Measurement of the $t\bar{t}$ production cross section in pp collisions at $\sqrt{s} = 7$ TeV with lepton + jets final states*, CMS Collaboration arXiv:1212.6682, DOI:10.1016/j.physletb.2013.02.021, Physics Letters B
- March 2013 *Measurement of differential top-quark pair production cross sections in pp collisions at $\sqrt{s} = 7$ TeV*, CMS Collaboration arXiv:1211.2220, DOI:10.1140/epjc/s10052-013-2339-4, European Physical Journal C

- January 2013 *Search for heavy quarks decaying into a top quark and a W or Z boson using lepton + jets events in pp collisions at $\sqrt{s} = 7$ TeV*, CMS Collaboration
arXiv:1210.7471, DOI:10.1007/JHEP01(2013)154, JHEP
- December 2012 *Measurement of the top-quark mass in $t\bar{t}$ events with lepton+jets final states in pp collisions at $\sqrt{s} = 7$ TeV*, CMS Collaboration
arXiv:1209.2319, DOI:10.1007/JHEP12(2012)105, JHEP
- December 2012 *Search for pair produced fourth-generation up-type quarks in pp collisions at $\sqrt{s} = 7$ TeV with a lepton in the final state*, CMS Collaboration
arXiv:1209.0471, DOI:10.1016/j.physletb.2012.10.038, Physics Letters B
- October 2012 *Inclusive and differential measurements of the $t\bar{t}$ charge asymmetry in proton-proton collisions at $\sqrt{s} = 7$ TeV*, CMS Collaboration
arXiv:1207.0065, DOI:10.1016/j.physletb.2012.09.028, Physics Letters B
- October 2012 *Search for charge-asymmetric production of W' bosons in top pair + jet events from pp collisions at $\sqrt{s} = 7$ TeV*, CMS Collaboration
arXiv:1206.3921, DOI:10.1016/j.physletb.2012.09.048, Physics Letters B
- March 2012 *Measurement of the charge asymmetry in top-quark pair production in proton-proton collisions at $\sqrt{s} = 7$ TeV*, CMS Collaboration
arXiv:1112.5100, DOI:10.1016/j.physletb.2012.01.078, Physics Letters B
- June 2012 *Measurement of the mass difference between top and antitop quarks*, CMS Collaboration
arXiv:1204.2807, DOI:10.1007/JHEP06(2012)109, JHEP

Outreach

- March 2013 Particle Physics Masterclass, Bristol
- January 2012 CERN tour for Bedales School students, CERN
- March 2011 Changing Perspectives festival, Bristol
- April 2011 Particle Physics Masterclass, Bristol

Honours and Awards

- 2010 University of Bristol Postgraduate Research Scholarship
- 2008 TAMU Department of Physics Fellowship
- 2004 Yuri Gagarin award in "Study and scientific research" nomination
Russian National Physics and Mathematics Olympiads (region round):
- 2004 1st diploma in physics and mathematics
- 2003 2nd diploma in physics, 3rd in mathematics

Scientific Interests

- Particle physics, detector physics, search for new phenomena
- Computer science, IT

Other Interests

- Playing musical instruments (guitar/piano)
- Alpine skiing, mountain biking, travelling