Olga Gogota

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EDUCATION

National Taras Shevchenko University of Kyiv, Ukraine 2012-2015
PhD student, defence expected at the end of 2016

National Taras Shevchenko University of Kyiv, Ukraine 2010-2012
Master of Science in Physics & High energy physics (with honours)

National Taras Shevchenko University of Kyiv, Ukraine 2006-2010
Bachelor of Science in Physics & High energy physics (with honours)

EXPERIENCE

Fermilab, Batavia, USA 2011-2015
guest scientist, summing up to about 2 years

DESY, Hamburg, Germany 2009-2011
guest scientist, summing up to about 1 year

PRESENTATIONS,POSTERS, SCHOOLS AND CONFERENCES

- ***"First observation and studies of the simultaneous production of J/ψ and Y at the Tevatron"***, APS April Meeting 2015, Baltimore, Maryland, USA(presentation);
- ***"Observation and studies of the double J/ψ production at the Tevatron"***, 47th Fermilab Users Meeting, USA (poster);
- ***"Measurements of W+b+X and W+c+X production cross sections at the Tevatron"***, APS April Meeting 2014, Savannah, Georgia, USA(presentation);
- **"*Double J/psi production at D0 experiment*"**, International school of Subnuclear Physics 2013(presentation);
- Terascale Monte Carlo School 2009 (DESY, Hamburg), April 2009.

TECHNICAL STRENGTHS

Programming languages, advanced	C/C++(ROOT), QT4/5, bash
Programming languages, Mathematics packages, experienced	Fortran, Java Matlab, Maple
Codes for simulations of ionizing particle transport, experienced	MCNP, FLUKA, GEANT
Parallel Computing	beginner in MPI, OpenMP
Other	advanced in LaTex

RESEARCH EXPERIENCE AND INTERESTS

Double parton scattering:

Production of quarkonium pairs (e.g. double J/ψ, $J/\psi+\Upsilon$)[1,3] in double parton scattering at the Tevatron. It would be interesting to compare parameter characterized double parton interactions, effective cross section, determined in production of quarkonium pairs with measurements in proton-proton collisions at the LHC. Another point of interest is looking at the LHC data for simultaneous production of $J/\psi+\Upsilon$ mesons.

The importance of multiple parton interactions in hadron-hadron collisions as a background to processes such as Higgs production or various new phenomena has been often underestimated in the past.

QCD:

The subject of my master project was the measurement of the differential W+c&b-jets cross sections at the muon channel at D0 experiment at Tevatron[2].

List of main publications:

1. *Evidence for simultaneous production of J/ψ and Υ mesons*
   By D0 Collaboration (Victor Mukhamedovich Abazov et al.).
   arXiv:1511.02428 [hep-ex].
2. *Measurement of the $W+b$-jet and $W+c$-jet differential production cross sections in $p\bar{p}$ collisions at $\sqrt{s}=1.96$ TeV*
   By D0 Collaboration (Victor Mukhamedovich Abazov et al.).
   arXiv:1412.5315 [hep-ex].
   10.1016/j.physletb.2015.02.012.
3. *Phys.Lett. B743 (2015) 6-14.*
   Observation and studies of double J/ψ production at the Tevatron
   By D0 Collaboration (Victor Mukhamedovich Abazov et al.).
   arXiv:1406.2380 [hep-ex].10.1103/PhysRevD.90.111101.
   Phys.Rev. D90 (2014) 11, 111101.