

**Yordanka Y. Ilieva**, Professor of Physics  
 Department of Physics and Astronomy  
 University of South Carolina

**(a) Professional Preparation**

Sofia University “St. Kliment Ohridski”	Sofia, Bulgaria	Physics	Dipl. Phys., 1996
Institute for Nuclear Research and Nuclear Energy, Bulgarian Academy of Sciences	Sofia, Bulgaria	Nuclear Physics	Ph.D., 2001
The George Washington University	Washington, DC	Nuclear Physics	2001 – 2005

**(b) Appointments**

2019 – Present	Professor of Physics, University of South Carolina, Columbia, SC
2012 – 2019	Associate Professor of Physics, University of South Carolina, Columbia, SC
2008 – 2012	Assistant Professor of Physics, University of South Carolina, Columbia, SC
2005 – 2008	Research Assistant Professor of Physics, The George Washington University, Washington, DC
2001 – 2005	Research Associate and Postdoctoral Fellow, The George Washington University, Washington, DC
2000 – 2011	Staff Scientist, Institute for Nuclear Research and Nuclear Energy, Bulgarian Academy of Sciences, Sofia, Bulgaria

**(c) Recent Peer-Reviewed Publications**

1. T. Cao, Y. Ilieva, N. Zachariou (CLAS Collaboration), Determination of the Polarization Observable  $C_x$ ,  $C_z$ , and  $P_y$  for the Quasi-Free Mechanism in the Reaction  $\vec{\gamma}d \rightarrow K^+ \vec{\Lambda}n$ , *Few Body Syst.* 59, 110 (2018).
2. C. Gleason, Y. Ilieva (CLAS Collaboration), *Determination of the Polarization Observable  $C_x$ ,  $C_z$ , and  $P$  for the Reaction  $\vec{\gamma}d \rightarrow K^0 \vec{\Lambda}(p)$* , *Few Body Syst.* 59, 129 (2018).
3. Y. Ilieva et al. (EIC-PID Consortium), *Particle Identification for a Future EIC Detector*, JINST 13 C03018 (2018).
4. N. Compton, C.E. Taylor, K. Hicks, P. Cole, N. Zachariou, Y. Ilieva, P. Nadel-Turonski, E. Klempt, V.A. Nikonov, A.V. Sarantsev et al. (CLAS Collaboration), *Measurement of the Differential and Total Cross Sections of the  $\gamma d \rightarrow K^0 \Lambda p$  Reaction within the Resonance Region*, accepted for publication in *Phys. Rev. C* (2017).
5. P.T Mattione et al. (CLAS Collaboration), *Differential cross section measurements for  $\gamma n \rightarrow \pi^- p$  above the first nucleon resonance region*, *Phys. Rev. C* 96, 035204 (2017).
6. Y. Ilieva et al. (CLAS Collaboration), *Studies of Final-State Interactions via Helicity Asymmetries in Exclusive Pseudoscalar Meson Photoproduction off Deuteron*, *Few Body Syst.* 58, 124 (2017).
7. Y. Ilieva, T. Cao, N. Zachariou et al. (CLAS Collaboration), *Studies of  $\Lambda n$  Interaction Through Polarization Observables for Final-State Interactions in the  $\vec{\gamma}d \rightarrow K^+ \vec{\Lambda}n$  Reaction*, *JPS Conf. Proc.* 17, 062001 (2017).
8. Y. Ilieva et. al., *MCP-PMT studies at the High-B test facility at Jefferson Lab*, JINST 11, C03061 (2016).
9. N. Zachariou, Y. Ilieva, B. L. Berman, N. Ya. Ivanov, M. M. Sargsian, R. Avakian, G. Feldman,

- P. Nadel-Turonski et al. (CLAS Collaboration), *Determination of the beam-spin asymmetry of deuteron photodisintegration in the energy region*, Phys. Rev. C **91**, 055202 (2015).
10. I. Pomerantz, Y. Ilieva, R. Gilman, D. Higinbotham, E. Piasetzky, S. Strauch, et al. (CLAS and Hall-A Collaborations), *Hard Two-Body Photodisintegration of  $^3\text{He}$* , Phys. Rev. Lett. **110**, 242301 (2013).

**(d) Supervision of Graduate Students**

- Colin Gleason, 2013 – 2017, *Determination of Polarization Transfer Coefficients and Hyperon Induced Polarization for Quasi-Free Hyperon Photoproduction off the Bound Neutron*. Ph.D., USC 2017.
- Tongtong Cao, 2010 – 2016, *Determination of the Polarization Observables  $C_x$ ,  $C_z$ , and  $P_y$  for Final-State Interactions in the Reaction  $\vec{\gamma}d \rightarrow K^+ \vec{\Lambda}n$* . Ph.D., USC 2016.
- Nicholas Zachariou, 2010 – 2012, *Determination of the Azimuthal Asymmetry of Deuteron Photodisintegration in the Energy Region  $E_\gamma = 1.1 - 2.3$  GeV*. Ph.D., GWU 2012. (dissertation co-advisor)
- Shakil Mohammed, 2008 – 2009, *A Feasibility Study of Three-Prong-Event Analysis of for the Search of Onset of Color Transparency* M.Sc., USC 2009.

**(e) Supervision of Undergraduate Students**

- Alan Rowland, 2018 – 2019, USC.
- Andrew Dunton, 2018, USC.
- Joshua Rapoport, 2017, USC.
- Corinne Barber, 2015 – 2016, USC.
- William Timmons, 2015, USC.
- Cameron Nickle, 2013 – 2014, USC.
- Eric Bringley, 2014, USC.
- Rachel Kuprenas, 2012, USC.
- Kevin Wood, 2011, USC.
- Weizhi Xiong, 2009 – 2012, USC.

**(f) Funding**

1. National Science Foundation
2. EIC R&D Program, Brookhaven National Lab

**(g) Synergistic Activities**

- Judge at the USC Annual Graduate Student Day
- Judge at the SC Science & Engineering Fair and mentor at SC Midway Physics Day
- Judge of students' papers at the Department of Defense Junior Science and Humanities Symposium at USC
- Co-organizer, *NSTAR2017: The 11th International Workshop on the Physics of Excited Nucleons*, Columbia, SC, 20 – 23 August 2017.
- Co-organizer, *Workshop on probing small-size configurations in high-t photo/electroproduction*, Jefferson Lab, 25 – 26 March 2011
- Advisor of the USC student organization *Women in Science and Engineering (WiSE)*