

## Joseph D. Osborn

Physics Department  
University of Michigan

jdosbo@umich.edu  
(859) 433-8738

## Education

- University of Michigan, MS and PhD in Physics. 06/2018  
Advisor: Prof. Christine Aidala
  - Dissertation: “Nonperturbative factorization breaking and color entanglement effects in dihadron and direct photon-hadron angular correlations in  $p+p$  and  $p+A$  collisions”
- University of Kentucky, 05/2013  
*Summa Cum Laude* BS in Physics, BS in Mathematics.

## Research and Work Experience

**Postdoctoral Research Fellow, University of Michigan** 06/2018-Present  
LHCb, sPHENIX, and PHENIX collaborations

- Launched new final-state hadron structure research program.
- Pioneered open source analysis framework and methods for research group members.
- Directed several graduate and undergraduate students in data analysis techniques and software construction for particle physics research.

**Graduate Research Assistant, University of Michigan** 07/2013-06/2018  
sPHENIX and PHENIX Collaborations

- Lead analyzer for software development in three independent analyses.
- Primary contributor to collaboration software framework required for analyzing data within experimental project deadlines.
- Designed new methods for signal-to-background separation in two-particle correlation measurements.
- Invented and optimized methods and software for photon detector calibration.
- Generated extensive documentation of analysis software and methods for future users.
- Original thesis research led to three published papers in peer reviewed journals.
- Selected by colleagues to give six talks at national and international conferences.

## Additional Relevant Skills

- Fluent in C++, Python, Git, SVN/CVS, bash environment. Familiar with Java, Fortran, and Doxygen.
- Excellent written and verbal communication skills.
- Ability to work within teams and groups to achieve complex software and scientific goals.
- Highly independent researcher and problem analyzer/solver.