

## **Big Data: The View from the Data Center**

Shigeki Misawa  
Brookhaven National Laboratory

Over the past 17 years, the RACF (now part of the BNL Scientific Data and Computing Center), has provided support for compute and storage for the three “big data” scientific experiments at the lab. These experiments, PHENIX and STAR at the Relativistic Heavy Ion Collider (RHIC) and ATLAS at the Large Hadron Collider (LHC), are representative of experiments in scientific fields with long histories in big data. As scientific research moves into the era of “ubiquitous” big data, experiments in many other fields are joining the ranks of big data participants. Although there are commonalities between the traditional big data experiments and new big data experiments, there are also many fundamental differences. This presentation discusses the computational and storage challenges that lie ahead, as well as possible solutions, as seen from the data center perspective in this new era of big data.