

## Data analysis and Software at LHAASO

Monday, 14 July 2025 16:20 (40 minutes)

This report focuses on the data analysis software and data processing progress of the Large High Altitude Air Shower Observatory (LHAASO). The annual data processing scale of LHAASO reaches 12 PB. By simulating air showers with CORSIKA, simulating detector responses with Geant4, and leveraging the ANYSW cross-platform compilation environment (integrating toolchains such as ROOT and Geant4), efficient data reconstruction and in-depth analysis are achieved. Based on existing data, several breakthrough results have been obtained. In addition, LHAASO is advancing an intelligent transformation project, aiming to build an intelligent data processing workflow to further enhance the observation efficiency and scientific discovery capabilities.

**Primary author:** 丽巧, 尹 (中国科学院高能物理研究所)

**Presenter:** 丽巧, 尹 (中国科学院高能物理研究所)

**Session Classification:** 大数据采集与存储