Research in Theoretical Particle Physics at Los Alamos HEP

A Data Management Plan created using DMPTool

Creator: Rajan Gupta

Affiliation: Los Alamos National Laboratory (LANL)

Funder: United States Department of Energy (DOE)

Template: Department of Energy (DOE): Office of Science

Last modified: 06-23-2016

Copyright information:
The above plan creator(s) have agreed that others may use as much of the text of this plan as they would like in their own plans, and customize it as necessary. You do not need to credit the creator(s) as the source of the language used, but using any of the plan's text does not imply that the creator(s) endorse, or have any relationship to, your project or proposal.
Research in Theoretical Particle Physics at Los Alamos HEP

Data types and sources

Data will be generated using monte Carlo simulations of lattice QCD and event generators for LHC. The results of the simulations will be published in open journals. The raw and processed data will be archived on local, institutional and national (NERSC, FNAL, OLCF) storage facilities. It will be made available to other researchers on request and to students and post-docs for further analysis and validation.

Data will not include any trade secrets or PIO

Content and format

The data is stored in a number of formats, XML, hdf5, binary. In each case it has headers with annotations. NERSC, FNAL and OLCF are community accepted repositories.

Sharing and preservation

To the extent possible, all data used in the figures and analysis will be included in the publication. Additional data will be made available on request and the publications will specify how to request the data, starting with the date of publication and for three years after that. No resources other than Los Alamos network connectivity are required to access and transfer data.

Protection

The data generated will not contain PIO or compromise U.S. national, homeland, and economic security. It will recognize proprietary interests, business confidential information, and intellectual property rights; avoid significant negative impact on innovation, and U.S. competitiveness; and otherwise be consistent with all applicable laws, regulations, and DOE orders and policies.

The data will not involve human or animal subjects.

Rationale

The data generated will help elucidate the interactions of elementary particles and interactions and help interpret experiments carried out at national and international facilities.
**Software & Codes**

A large fraction of the software and codes are already publically available. The rest are being developed and annotated. They will be archived and made available on request at the time of publication.