



## Collaboration Agreement for the DPHEP Project

BETWEEN:

The Partners of the DPHEP Project (the “Partners”) set out in Annex 1 to the Collaboration Agreement,

CONSIDERING THAT:

(1) Data from high-energy physics (HEP) experiments are collected with significant financial and human effort and are mostly unique;

(2) The Data Preservation and Long Term Analysis in High Energy Physics (DPHEP) project (the “Project”), an inter-experimental study group on HEP data preservation and long-term analysis, was initially formed by large collider-based experiments to investigate the technical and organizational aspects of HEP data preservation and convened by a Chair and a Project Manager as a panel of the International Committee for Future Accelerators (ICFA); Two reports were released, providing an analysis of the research case for data preservation and a detailed description of the various projects at experiment, laboratory and international levels;

(3) In its report of May 2012 (see Annex 2), the study group provided a concrete proposal for an international collaboration in charge of the Project and data management and policies in high-energy physics;

(4) The Partners have expressed their interest to take part in and contribute to the Project in order to implement the recommendations provided in the report referred to in Annex 2 and wish to formalize their collaboration through the present Collaboration Agreement;

(5) The mutual benefit of the Partners that shall result from collaboration between them;

HAVE AGREED AS FOLLOWS:

## **Article 1**

### **Scope**

- 1.1 The Collaboration Agreement defines the framework under which the Partners will collaborate in the Project.
- 1.2 In particular, the Partners have identified the priorities set out in Annex 3 as potential areas of collaboration.
- 1.3 Except as may be provided otherwise, each Partner shall bear its own cost of participation in the Project.

## **Article 2**

### **The Project**

2.1 The Project, in coordination with the International Committee for Future Accelerators (ICFA), aims at:

- 1) Positioning itself as the natural forum for the entire discipline in order to foster discussion, achieve consensus and transfer knowledge in two main areas:
  - a. Technological challenges in data preservation in HEP,
  - b. Diverse governance at the collaboration and community level for preserved data,
- 2) Co-ordinate common R&D projects aiming to establish common, discipline-wide preservation tools,
- 3) Harmonize preservation projects across the Partners and liaise with relevant initiatives from other fields,
- 4) Design the long-term organization of sustainable and economic preservation in HEP,
- 5) Outreach within the community and advocacy towards the main stakeholders for the case of preservation in HEP.

2.2 The detailed scientific and technical objectives of the Project shall be described in an Annex to this Collaboration Agreement.

## Article 3

### Organizational structure and decision mechanism

The organizational structure of the Project shall include the following entities:

- 1) International Advisory Committee (IAC)
- 2) Collaboration Board (CB)
- 3) Implementation Board (IB)
- 4) Project Manager
- 5) Chairperson

#### 3.1 International Advisory Committee (IAC)

1. Is formed by recognized experts in HEP and the wider data preservation community
2. Provides the Project with specific advice on specific actions (workshops, alliances, projects, documents) or strategic plans
3. Is approved by ICFA

#### 3.2 Collaboration Board (CB)

1. The CB is formed by one representative of each Partner.
2. Is chaired by the DPHEP Chairperson
3. Discusses and adopts medium-term strategy, supervises the production of the yearly progress reports, encourages multi-laboratory projects and acts as a coordination board for the collaboration between the Partners.
4. The CB Chair can invite members from other institutes associated to the Collaboration and directly involved in concrete actions for data preservation in HEP to assist the CB in specific decisions.

#### 3.3 Implementation Board (IB)

The Implementation Board is formed by contributors from the DPHEP partners. The IB members are proposed by the Project Manager and are approved by the CB.

The Implementation Board meets regularly and is responsible for driving the work of the Collaboration forward, in between and through regular workshops and other larger events.

#### 3.4 Project Manager

The Project Manager shall coordinate the Project, including the organization of Project events, coordination of funding proposals and ensuring the information flow between the Partners.

The Project Manager shall be appointed, with the approval of the Collaboration Board, for an initial period of 3 years.

The Project Manager role shall rotate around the partners that have signed this Collaboration Agreement.

Proposals for future Project Managers shall be drawn up by the Implementation Board for approval by the Collaboration Board and sent for information to ICFA.

### 3.5 Chairperson

The Chairperson is the Chair of the Collaboration board and provides the liaison to ICFA. As with the Project Manager, the Chairperson is appointed for an initial period of 3 years and is elected by the Collaboration Board.

## Article 4

### Responsibilities of the Partners

4.1 The Partners shall coordinate their activities in the area of HEP data preservation and long-term analysis in accordance with this Collaboration Agreement, and in particular Article 2.

4.2 Any contribution by a Partner shall be set out in an Annex to this Collaboration Agreement.

4.3 As the Collaboration develops, new directions may evolve that will also be described in further Annexes, which have to be approved by the CB and signed by the DPHEP Chair and Project Manager.

## Article 5

### Intellectual Property

5.1 Proprietary information, including any information protected by trademark, patent or copyright, whether pre-existing or developed in the execution of this Collaboration Agreement, contributed to the Project by a Partner in the execution of this Collaboration Agreement, shall not create any right in respect of that information for the other Partners, other than a free, irrevocable and non-exclusive license to use such information in so far as required for the execution of this Collaboration Agreement or in the scope of its scientific programme, for non-military purposes.

5.2 The Partners provide no warranties or representations of any kind to each other. They shall have no liability to each other with respect to the subject matter of this Article and each Partner shall be exclusively liable for the consequences of its use of proprietary information contributed to the Project.

## **Article 6**

### **Publications**

6.1 The Partners shall strive to jointly publish the results of the Project as Open Access publications.

6.2 In so far as the Partners do not jointly publish the results of the Project, publications by one Partner involving results developed by the other Partner shall be subject to the latter's prior written approval, which shall not be withheld unreasonably.

## **Article 7**

### **Liability**

The Partners shall have no liability to each other in the execution of this Collaboration Agreement.

## **Article 8**

### **New Partners**

The Project intends to welcome new Partners. The admission of any new Partner is subject to the formal approval by the CB by a qualified majority. Addenda to this agreement of cooperation are authorized by the Chair, the Project Manager and the representatives of the new partner.

## **Article 9**

### **Entry into force and duration**

9.1 This Collaboration Agreement enters into force upon signature by at least 3 Partners. It can be terminated by a common decision of all Partners.

9.2 Any Partner may withdraw from this Collaboration Agreement, upon one-year-advance written notice to the CB.

## **Article 10**

### **Dispute resolution**

The Partners shall settle any difference concerning this Collaboration Agreement amicably. Where this is not possible, the Partners shall resort to arbitration in accordance with a procedure to be specified by the Partners. Notwithstanding reference of the dispute to arbitration, the Partners shall continue to perform their obligations under this Collaboration Agreement.

**Annex 1: Partners of the DPHEP Project and contact persons**

<b>Initial DPHEP Partner</b>	<b>Location</b>	<b>Contact person</b>
European Organization for Nuclear Research, <b>CERN</b>	Switzerland	J. Shiers
Deutsches Elektronen-Synchrotron, <b>DESY</b>	Germany	D. South
Helsinki Institute of Physics, <b>HIP</b>	Finland	K. Lassila-Perini
Institute of High Energy Physics, <b>IHEP</b>	China	G. Chen
Institut national de physique nucléaire et de physique des particules, <b>IN2P3</b>	France	G. Lamanna
Institute of Particle and Nuclear Studies, High Energy Accelerator Research Organisation, <b>IPNS, KEK</b>	Japan	T. Hara
Max Planck Institut für Physik, <b>MPP</b>	Germany	S. Kluth

Following institutes are members of the DPHEP Study Group and intend to join formally the DPHEP Collaboration:

Brookhaven National Laboratory, <b>BNL</b>	USA	M. Ernst
<b>CSC- IT Center for Science</b>	Finland	N.N.
Fermi National Accelerator Laboratory, <b>FNAL</b>	USA	S. Wolbers
Institute of Particle Physics, <b>IPP</b>	Canada	R. Sobie
Istituto Nazionale di Fisica Nucleare, <b>INFN</b>	Italy	M. Maggi
<b>SLAC National Accelerator Laboratory</b>	USA	C. Cartaro
Science and Technology Facilities Council, <b>STFC</b>	UK	J. Bicarregui

For the European Organization for Nuclear Research, CERN

Geneva, 26/05/2014



A handwritten signature in blue ink, appearing to read 'S. Bertolucci', is written over a circular blue stamp. The stamp contains the text 'ORGANISATION EUROPEENNE DE RECHERCHE NUCLEAIRE' and 'CERN'.


**S. Bertolucci**  
Director for Research and  
Scientific Computing

For the DPHEP Project



A handwritten signature in blue ink, appearing to read 'J. Shiers', is written over a horizontal line.

**J. Shiers**  
DPHEP Project Manager

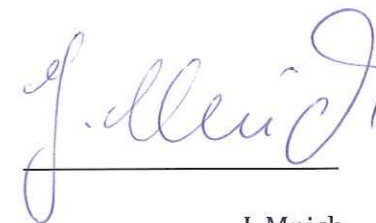


A handwritten signature in blue ink, appearing to read 'C. Diaconu', is written over a horizontal line.

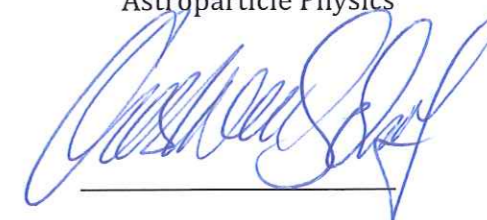
**C. Diaconu**  
DPHEP Chairperson

For Deutsches Elektronen-Synchrotron, DESY

Hamburg, 27.5.2014



J. Mnich  
Director for Particle and  
Astroparticle Physics



C. Scherf  
Director of Administration

For the DPHEP Project



J. Shiers  
DPHEP Project Manager



C. Diaconu  
DPHEP Chairperson



For Helsinki Institute of Physics (HIP), Finland

Helsinki, 7.6.2014



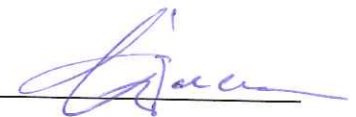
Juha Äystö  
Director

Juha Äystö  
Director  
Helsinki Institute of Physics  
+358 9 191 50520

For the DPHEP Project



J. Shiers  
DPHEP Project Manager



C. Diaconu  
DPHEP Chairperson

or Institute of High Energy Physics (IHEP), China  
Beijing, 27. MAI 2014



Yifang Wang  
IHEP Director

For the DPHEP Project



J. Shiers  
DPHEP Project Manager



C. Diaconu  
DPHEP Chairperson

For Institut national de physique nucléaire et de physique des particules, IN2P3

Paris, 18 JUIN 2014



J. Martino  
Director IN2P3


For the DPHEP Project

J. Shiers  
DPHEP Project Manager

C. Diaconu  
DPHEP Chairperson

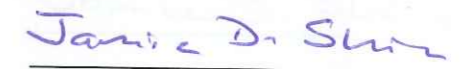
For Institute of Particle and Nuclear Studies (IPNS),  
High Energy Accelerator Research Organisation, KEK, Japan

Tsukuba, May 30, 2014




M. Yamauchi  
Director of IPNS

For the DPHEP Project



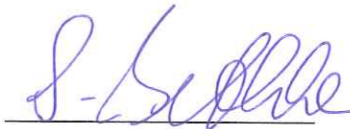
J. Shiers  
DPHEP Project Manager



C. Diaconu  
DPHEP Chairperson

For Max-Planck-Institut für Physik (MPP)

Munich, 9.7.2014



S. Bethke  
Director MPP

For the DPHEP Project



J. Shiers  
DPHEP Project Manager



C. Diaconu  
DPHEP Chairperson

**Annex 1: Partners of the DPHEP Project and contact persons**

<b>Initial DPHEP Partner</b>	<b>Location</b>	<b>Contact person</b>
European Organization for Nuclear Research, <b>CERN</b>	Switzerland	J. Shiers
Deutsches Elektronen-Synchrotron, <b>DESY</b>	Germany	D. South
Helsinki Institute of Physics, <b>HIP</b>	Finland	K. Lassila-Perini
Institute of High Energy Physics, <b>IHEP</b>	China	G. Chen
Institut national de physique nucléaire et de physique des particules, <b>IN2P3</b>	France	G. Lamanna
Institute of Particle and Nuclear Studies, High Energy Accelerator Research Organisation, <b>IPNS, KEK</b>	Japan	T. Hara
Max Planck Institut für Physik, <b>MPP</b>	Germany	S. Kluth

Following institutes are members of the DPHEP Study Group and intend to join formally the DPHEP Collaboration:

Brookhaven National Laboratory, <b>BNL</b>	USA	M. Ernst
<b>CSC-</b> IT Center for Science	Finland	N.N.
Fermi National Accelerator Laboratory, <b>FNAL</b>	USA	S. Wolbers
Institute of Particle Physics, <b>IPP</b>	Canada	R. Sobie
Istituto Nazionale di Fisica Nucleare, <b>INFN</b>	Italy	M. Maggi
<b>SLAC</b> National Accelerator Laboratory	USA	C. Cartaro
Science and Technology Facilities Council, <b>STFC</b>	UK	J. Bicarregui

**Annex 2: Status Report of the DPHEP Study Group: Towards a Global Effort  
for Sustainable Data Preservation in High Energy Physics**

Document reference: DPHEP-2012-001, May 2012,  
<http://arxiv.org/pdf/1205.4667.pdf>.

### **Annex 3: List of potential areas of collaboration**

As outlined in the DPHEP Blueprint, the areas of potential collaboration include:

- Tools and best practices for the ingest process;
- Tools and best practices for making data discoverable for clearly identified communities under defined (Open) Access policies;
- Policies and best practices for archival management;
- Tools and best practices for “adding value” to data;
- Generic validation framework and similar services;
- Best practices and tools for preparing “future-proof” offline environments.

This list is non-exhaustive and may be updated as required – typically annually – with the agreement of the management structures of the DPHEP Collaboration.