



## UNIVERSITY OF OREGON

December 1, 2017

To whom it may concern:

I hereby certify that the Center for High Energy Physics (CHEP) at the University of Oregon intends to participate in the SMARTHEP network should the network be selected for funding by the European Commission.

CHEP will participate in the SMARTHEP network in the following ways:

- CHEP engineers, research associates and postdoctoral scholars will work together with SMARTHEP on firmware for use in the global feature extractor (gFEX) model of the Phase 1 upgrade of the ATLAS Experiment.
- CHEP engineers, research associates and postdoctoral scholars will work together with SMARTHEP on firmware for use in the Global Trigger of the Phase 2 upgrade of the ATLAS Experiment.
- CHEP research associates and postdoctoral scholars will work together with SMARTHEP on using machine learning techniques such as Deep Neural Nets for trigger algorithms to be implemented in both hardware and software.

A senior staff member will have a seat in the Supervisory Board of the network.

CHEP faculty members will give lectures at the yearly Innovative Training Network (ITN) meetings. The lectures will cover the hardware and software aspects of the ATLAS trigger system.

CHEP will host and provide secondment supervision to the graduate students in the ITN, as described in the part B of the proposal.

The participation of CHEP in the ITN is in line with research presently being carried out by University of Oregon personnel at CERN. CHEP looks forward to participating in this Marie Skłodowska-Curie ITN because of our mutual interest in hardware and software trigger systems.

### UO CENTER FOR HIGH ENERGY PHYSICS

Department of Physics · 1274 University of Oregon · Eugene OR 97403-1274  
(541) 346-4898 · Fax (541) 346-5217

It is understood that all costs incurred by CHEP related to the implementation of the practical research and/or complementary training will be reimbursed by the relevant beneficiary of the grant agreement. CHEP shall invoice these research training costs to the appropriate full network partner(s).

Sincerely yours,

A handwritten signature in blue ink, appearing to be 'ET', with a long horizontal stroke extending to the right.

Eric Torrence  
Director, Center for High Energy Physics  
Professor of Physics