

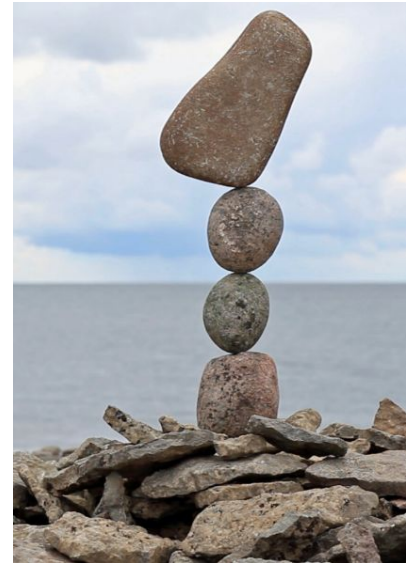
# PPRP Proposal

## HEP Software UK

(Trigger/Reco WP4)

18 June 2020

Davide Costanzo



# Organisation

External Collaborators

WLCG/HSF

GridPP

IRIS-HEP, CCE (USA)

Other international initiatives

Industrial partners

WP0: Management

Advisory Board  
(Experiments: LHC, DUNE, ...)

WP1: Data Management

WP2: Generators

WP3: Simulation

WP4: Trigger/Reco

WP5: Analysis

Cross area Working groups

Optimisation and Platforms

Training and outreach

Impact

Also relevant for this WP

# Current thinking of the work on WP4

- This needs to be cross-experiment
  - In the sense that prototypes and ideas developed can be ported
- WP4.1 to develop tracking code on FPGA
  - Interest for HL-LHC to be used in Triggers (both L1 and HLT)
  - Prototype development **beyond** what is already funded
  - Could be implemented in offline code on a longer time scale?
  - Kalman filter and Hough transform development, where there is already expertise
- WP4.2 Optimisation and portability
  - Scheduling of GPU work .
    - Could the experience of Allen (LHCb) be used more broadly?
    - How do we turn this into a package of work?
  - Optimisation of code.
    - Generic code optimisation person shared across WPs?
    - Key for any new code developed for CPU **and** accelerators.