

# InterTwin : an interdisciplinary Digital Twin for Particle Physics

*Tuesday, October 3, 2023 10:40 AM (20 minutes)*

High energy physics, radio astronomy, astroparticle physics, all are expected to significantly advance the state of the art of modelling and simulation. The EU-funded interTwin project will co-design and implement the prototype of an interdisciplinary digital twin engine. This open-source platform will provide generic and tailored software components for modelling and simulation to integrate application-specific digital twins. The goal is to develop a common approach that is applicable across the whole spectrum of scientific disciplines to facilitate developments and collaboration. As a result, a consolidation of software technologies supporting research will emerge. In this presentation the developments of the project interTwin will be presented with a focus on HEP simulations from an experimental (detector simulations) and theoretical (Lattice QCD simulations).

**Primary author:** CAMPOS PLASENCIA, Isabel (Consejo Superior de Investigaciones Científicas (CSIC) (ES))

**Presenter:** CAMPOS PLASENCIA, Isabel (Consejo Superior de Investigaciones Científicas (CSIC) (ES))

**Session Classification:** CPAN - Investigación orientada, tecnología e innovación

**Track Classification:** CPAN - Investigación orientada, tecnología e innovación