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## **Synergies between a U.S.-based Electron-Ion Collider and the European research in Particle Physics**

This document is submitted as input to the European Strategy for Particle Physics Update (ESPPU). The U.S.-based Electron-Ion Collider (EIC) project recently received strong endorsement by the U.S. National Academies of Sciences, Engineering, and Medicine, bringing its realization another step closer. A large group of European scientists is already involved in the EIC project. Currently, more than a quarter of the EIC User Group (consisting of over 800 scientists) is based in Europe. This European involvement is not only an important driver of the EIC, but can also be beneficial for a number of related ongoing and planned particle physics experiments at CERN. In this document, the connections between the scientific questions addressed at CERN and at the EIC are outlined, as well as the shared interest regarding detector R&D. The aim is to highlight how the synergies between the European Particle Physics research and the EIC project offer ample opportunities to foster progress at the forefront of collider physics.

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