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Software and Data Citation in High Energy Physics -Current Practices and Ideas for the Future

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High Energy Physics (HEP) is well known as a "Big Data" science, but it should also be seen as a "Big Software" enterprise. For example, to support the activities of the Large Hadron Collider at the European Laboratory for Particle Physics (CERN) tens of millions of lines of code have been written by thousands of researchers and engineers over the past 20 years.

The wider scientific community has been investigating the development of standards for software and data citation. For software such standards can help with the attribution of credit to individuals for their contributions, and also provide metrics for assessing the impact of specific software. In addition emerging expectations regarding data and software preservation, and the reproducibility of scientific results, require greater attention to the software and data samples used.

In this presentation, we will review current practices and initiatives for software and data citation and attribution in HEP. We will then explore how ideas being discussed in the wider scientific community could be applied in HEP and what could be gained in the process.

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