

Project 6/2014: "**Cosmological Simulations Data Processing Center**"

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Abstract:

We propose to build up a data center for cosmological simulations to federalize the outcome of cosmological, hydrodynamical simulations within the cluster of excellence and to the broader, scientific community. The data of several, large, cosmological hydrodynamical simulations will be stored on the C2PAP cluster and users will be able to access data products via web interfaces, similar to the existing prototypes in Galformod (e.g. JobRunner, Phoxy browser, HydroSim database). Several categories of data products will be made available, ranging from raw or meta data up to high level scientific data products (maps or virtual observations). The later will be derived from the simulation data through post-processing on the C2PAP cluster. These interfaces, as well as the stored simulation data should have a legacy exceeding the founding period which is a key ingredient to guarantee a deep scientific impact.