

HOW TO SIMULATE A STATISTICAL SAMPLE OF OBJECTS FOR GALAXY FORMATION STUDIES

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ABSTRACT. We will review the methods that allow to obtain samples of simulated galaxies of comparable statistical value to those of large surveys. For instance, the SDSS provides about one million galaxies which can be used to construct distribution functions of several galaxy properties. Is it possible to obtain distributions of equal significance from a model that accounts for the evolution of the universe and its contents? What needs to be sacrificed in order to achieve this? Are the necessary simplifications justified? Will we be able to do this for LSST? We will go through these and other questions related to this problem.

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