

## Overview of Grid Computing within the BaBar Experiment

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The BABAR Collaboration, based at Stanford Linear Accelerator Center (SLAC), Stanford, US, has been performing simulation studies and data analysis for 7 years using a number of compute farms around the world. Recent developments in Grid technologies could provide a way to manage the distributed resources in a single coherent structure. We describe enhancements to the BABAR Experiment's distributed Monte Carlo generation system to make use of European and North American Grid resources and present the results with regard to BABAR's latest cycle of Monte Carlo production. We compare the benefits of a local and Grid-based systems, the ease with which the system is managed and the challenges of integrating the Grid with legacy software. We compare job success rates and manageability issues between Grid and non-Grid production and present an investigation into the efficiency costs of different methods of making input data, in the form of files and database information, available to the job in a distributed environment.