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## The SEAL Component Model

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This paper describes the component model that has been developed in the context of the LCG/SEAL project. This component model is an attempt to handle the increasing complexity in the current data processing applications of LHC experiments. In addition, it should facilitate the software re-use by the integration of software components from LCG and non-LCG into the experiment's applications. The component model provides the basic mechanisms and base classes that facilitate the decomposition of the whole C++ object-oriented application into a number of run-time pluggable software modules with well defined generic behavior, inter-component interaction protocols, run-time configuration and user customization.

This new development is based on the ideas and practical experiences of the various software frameworks in use by the different LHC experiments for several years. The design and implementation choices will be described and the practical experiences and difficulties in adopting this model to existing experiment software systems will be outlined.

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