

# LAPACK in SILC: Use of a Flexible Application Framework for Matrix Computation Libraries

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## Abstract

*This paper presents a novel application framework named Simple Interface for Library Collections (SILC) that allows users to make use of matrix computation libraries in a flexible and language-independent manner. Using SILC, various computing environments as well as alternative solvers and matrix storage formats from different libraries can be easily utilized. The present paper describes the design and implementation of SILC for shared-memory parallel computing environments, and discusses the use of LAPACK in the framework of SILC together with some experimental results on the performance of the implemented system.*