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Low rank tensor methods in Galerkin-based isogeometric analysis

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- We employ tensor decomposition to drastically reduce computation times for Galerkin-based isogeometric analysis
- We introduce a compact Kronecker format of Galerkin matrices which minimizes storage requirements
- We reduce demanding multi-dimensional quadrature operations on tensor-product B-splines to inexpensive one-dimensional operations on univariate B-splines
- Computation cost is proportional to the geometric complexity of the input isogeometric domain
- We control the approximation error and obtain full convergence rates

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