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A collocated isogeometric finite element method based on Gauss-Lobatto Lagrange extraction of splines

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We introduce an extraction operator that links Gauss-Lobatto Lagrange (GLL) functions with splines.

Collocated IGA is based on the weighted residual form, Gauss-Lobatto quadrature, and GLL extraction.

We compare collocated IGA with isogeometric Galerkin and point-collocation.

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