

Exact Integration for Rational Finite Elements

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This talk summarizes a joint work with Tabea Tscherpel and Lars Diening. We introduce an exact integration formula for a class of rational polynomials in 2D. Based on this we present finite element implementations using rational basis functions. In particular, we present simple Matlab implementations of the singular Zienkiewicz and the lowest-order Guzman–Neilan Element.

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