

Latest Publications

1. J. Hu, Y. Liang, **R. Ma** and M. Zhang. A family of conforming finite element divdiv complexes on cuboid meshes, *Numerische Mathematik*, 2024, 156, 1603-1638
2. J. Hu, **R. Ma** and Y. Sun. A lower order element for the linear elasticity problem in 3D, *Journal of Computational Mathematics*, 2024, online
3. J. Hu, Y. Liang and **R. Ma**. Conforming finite element DIVDIV complexes and the application for the linearized Einstein-Bianchi system. *SIAM Journal on Numerical Analysis*, 2022, 60(3), 1307-1330
4. J. Hu, L. Ma and **R. Ma**. Optimal superconvergence analysis for the Crouzeix-Raviart and the Morley elements. *Advances in Computational Mathematics*, 2021, 47(52)
5. J. Hu, **R. Ma** and M. Zhang. A family of mixed finite elements for the biharmonic equations on triangular and tetrahedral grids. *Science China Mathematics*, 2021, 64: 2793-2816
6. C. Carstensen and **R. Ma**. Adaptive mixed finite element methods for non-selfadjoint indefinite second-order elliptic PDEs with optimal rates. *SIAM Journal on Numerical Analysis*, 2021, 59(2):955-982
7. C. Carstensen and **R. Ma**. Collective marking for arbitrary order adaptive least-squares finite element methods with optimal rates. *Computers and Mathematics with Applications*, 2021, 95:271-281
8. F. Bertrand, D. Boffi and **R. Ma**. An adaptive finite element scheme for the Hellinger-Reissner elasticity mixed eigenvalue problem. *Computational Methods in Applied Mathematics*, 2021(3): 501-512
9. J. Hu and **R. Ma**. Partial relaxation of C^0 vertex continuity of stresses of conforming mixed finite elements for the elasticity problem. *Computational Methods in Applied Mathematics*, 2021, 21(1):89-108
10. J. Hu and **R. Ma**. Nonconforming mixed finite elements for linear elasticity on simplicial grids. *Numerical Methods for Partial Differential Equations*, 2019, 35(2), 716-732