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**An Approximate Inverse-Based Preconditioner for
Incompressible Magnetohydrodynamics**

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We consider an approximate inverse preconditioner for a mixed finite element discretization of an incompressible magnetohydrodynamics (MHD) problem. The derivation relies on the nullity of the discrete curl-curl operator in the Maxwell subproblem. We obtain a formula for the inverse that contains zero blocks, and use discretization considerations to sparsify the formula to develop a practical preconditioner. We demonstrate the viability of our approach with a set of preliminary numerical experiments.