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**Optimized Schwarz preconditioning for spectral element
based magnetohydrodynamics**

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A recent theoretical result on optimized Schwarz algorithm presented in [SISC, 29(6),pp 2402–2425] enables the modification of an existing Schwarz procedure to its optimized counterpart. In this work, it is shown how to modify a bilinear FEM based Schwarz preconditioning strategy to its optimized version. The latter is then employed to precondition the pseudo Laplacian operator arising from the spectral element discretization of the magnetohydrodynamic equations.