

# Coupling of finite and boundary element methods: Do we need the symmetric formulation

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While the symmetric coupling of finite and boundary element methods is stable for an almost arbitrary choice of finite and boundary elements, its implementation requires a Galerkin formulation and the discretization of the hypersingular boundary integral operator. This is why engineering and industrial applications in most cases still rely on the use of the classical one-equation coupling which also allows the use of a collocation boundary element method. Here we give an overview on recent stability results on the one-equation coupling of finite and boundary element methods.

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