

## Non-Symmetric Coupling of FVM and BEM

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We present the analysis of the non-symmetric coupling of a finite volume method and the boundary element method to solve a transmission problem of a diffusion convection reaction problem in the interior domain and a diffusion problem in the exterior. The discrete system maintains naturally local conservation, and allows for an upwind scheme to guarantee stability for convection dominated problems. We present numerical examples to demonstrate the benefits of the presented approach.

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