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A Quadratic Boundary Element Formulation for Neutron Diffusion Equation

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 [Keywords](#)
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Abstract: The boundary element method (BEM) is a technique based on the principle of the conversion of the governing differential equation to the boundary integral equation with consequent reduction by one in the dimension of the problem. In this work, quadratic boundary elements and thus BEM have been applied to neutron diffusion calculations to render the treatment of curved boundaries possible. The results of the developed computer program BENDQ has been compared to the analytical solutions and validated.



Key Words: Boundary Element Method, Neutron Diffusion Equation

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