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Meshless and analytical solutions to the time-dependent advection-diffusion-reaction equation with variable coefficients and boundary conditions

M. Gharib , M. Khezri , S.J. Foster

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Highlights

- The unsteady ADR equation is formulated and solved by the meshless generalised RKPM.
- A general Robin BC is formulated and precisely enforced in a novel approach.
- An analytical solution is derived for 1D problem with temporally changing Robin BC.
- A normalisation procedure is introduced to interpret the results to relevant applications.

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