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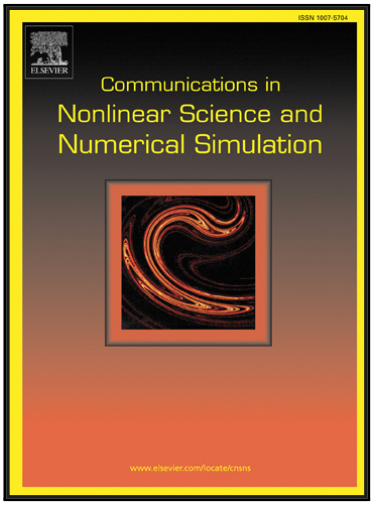

An efficient finite element method for pricing American multi-asset put options

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Highlights

- We consider a penalty method in which the LCP could be reformulated into a nonlinear parabolic problem on an unbounded domain.
- For the unbounded computational domain, a perfectly matched layer (PML) technique is applied to truncate it.
- We use a semi-implicit finite element method (SIFEM) to solve the resulting bounded domain problem related to the option.

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