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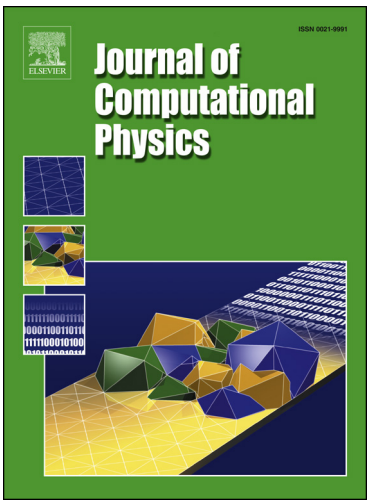

A space-fractional Monodomain model for cardiac electrophysiology combining anisotropy and heterogeneity on realistic geometries

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Highlights

- A fractional monodomain to account for both anisotropy and heterogeneity is proposed.
- Integral expression of nonlocal operator is linked to fractional matrix powers.
- The methodology proposed naturally handles bounded domains in more than 1D.
- Computations are performed on unstructured meshes for regular and irregular domains.