Modèles et méthodes mathématiques en électrocardiologie

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Résumé

Computing the electrical excitation wave that occurs in the heart is of great scientific interest, to understand propagation patterns and also as a base to understand the formation of the electrocardiogram (ECG). This propagation can be modeled by the bidomain system of reaction-diffusion equations, the simpler monodomain system of equations, ... These models will be presented. Various numerical results and applications will be chown and discussed, including some 2D/3D simulated ECGs on realistic geometries.

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