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Yuan He* (yuan@math.utexas.edu). *Recovering physical parameters in electrocardiology models from boundary data.*

We consider parameter identification problems for reaction-diffusion models, mainly the FitzHugh-Nagumo model and the bidomain model, in electrocardiology where the objective is to reconstruct physical parameters in these models from boundary measurement of electrical potential. We construct some iterative schemes for the reconstruction problem and show numerical simulations to demonstrate the performance of the proposed methods. (Received February 10, 2014)