Quiz 4.7: HH versus LIF

Exponential Integrate-and-fire model

0 points possible (ungraded)

An exponential integrate-and-fire model can be derived

- [x] from a 2-dimensional model (such as the FizHugh-Nagumo model) assuming that the auxiliary variable w is constant ✔
- [x] from the HH model, assuming that the gating variables h and n and m are constant
- [ ] from the HH model, assuming that the gating variables m is instantaneous and h and n are constant ✔

✖

Submit You have used 1 of 1 attempt

Answers are displayed within the problem

Reset

0 points possible (ungraded)

- [ ] in a 2-dimensional model such as the FizHugh-Nagumo model, the auxiliary variable w is necessary to implement a reset of the voltage after a spike ✔
- [ ] in a nonlinear integrate-and-fire model, the auxiliary variable w is necessary to implement a reset of the voltage after a spike
- [x] in a nonlinear integrate-and-fire model, a reset of the voltage after a spike is implemented algorithmically/explicitly ✔
- [ ] in the FizHugh-Nagumo model, a reset of the voltage after a spike is implemented algorithmically/explicitly

✖

Submit You have used 1 of 1 attempt

Answers are displayed within the problem

Discussion

Topic: Week 4 / Quiz 4.7: HH versus LIF

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