

Review of: "Depolarization block of interneurons"

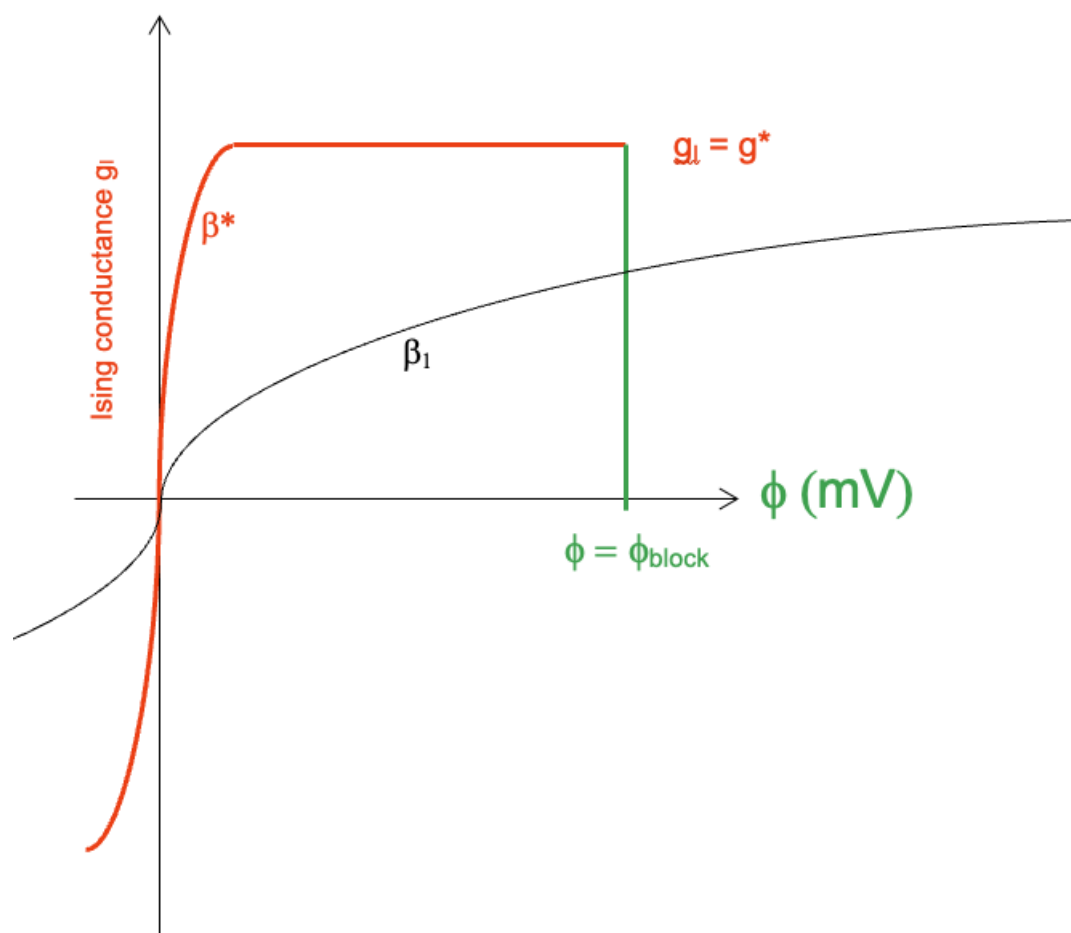
Gianluigi Zangari del Balzo¹

¹ Sapienza University of Rome

Potential competing interests: No potential competing interests to declare.

I take this opportunity to greet dear Professor Brunello Tirozzi, a great scientist and a very nice, kind and affable man, whom I had the pleasure of meeting when I attended the Physics Department of Sapienza University of Rome many years ago as a student of Professor Giorgio Parisi.

I would therefore like to propose to dearest Professor Tirozzi a solution that could be an alternative to his elegant proof. My proposal is performed with my *nouns*, described by the Statistical Field Theory of Nerve Conduction - SFT (\tilde{n}) (Zangari del Balzo, 2021)



In my opinion this solution of mine could fit well because in the depolarization block there is no decrease, but the spikes simply stop, as Professor Tirozzi rightly observed. This is very significant for the SFT(\tilde{n}) theory, indeed it could be further evidence in favor of the transmission of nerve impulses with *nuons*, even at high frequencies (flows). The SFT(\tilde{n}) model foresees a single form of development of the currents, which integrates the stochastic element in the so-called “Ising Machines”. In our case, the model describing the blocking current foresees two Ising machines for Na and K, with a magnetization (Ising conductance) of plateau M^* reached at high f and a low temperature (high b) (see figure to the side, adapted from (Zangari del Balzo, 2021)) which triggers a flow of *nuons* up to the value of f_{block} causing a switch.

As can be seen, the SFT(\tilde{n}) model with *nuons* seems to explain well the depolarization block.

I remain at your disposal for any clarification

very affectionate greetings to Prof. Tirozzi

Rome, July 8th 2023

Gianluigi Zangari del Balzo, theoretical physicist

gianluigi.zangaridelbalzo@gmail.com

Bibliografia

Zangari del Balzo, G. (2021). *Statistical field theory of the transmission of nerve impulses*.

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<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7787247/>

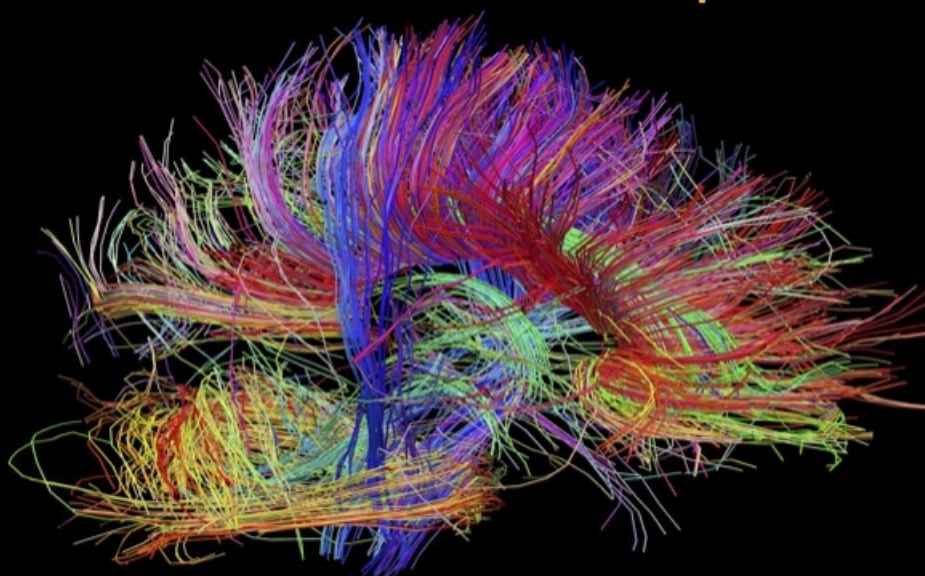
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Gianluigi Zangari del Balzo

Statistical field theory of the transmission of nerve impulses



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