

# Review of: "Kirchhoff Coupling Generates ATP, the Chemical Energy of Life"

Magdalena Kowacz<sup>1</sup>

<sup>1</sup> Akademickie Centrum Komputerowe CYFRONET AGH

**Potential competing interests:** No potential competing interests to declare.

The idea proposed by authors of linking fundamental physics laws with cell bioenergetics is in my opinion extremely valuable and much needed. It can indeed enable us to analyse biological molecular processes by completely different tools. Personally, I find it very attractive.

The paper itself comprises only a very brief overview of possible ways of use of Kirchhoff's law. It is just a highlight without in depth analysis. I hope in their future works, authors will be able to provide some guidelines for "average" biophysics on how to use the law in practice.

Regarding structure of this short paper, I would recommend to:

- define what ( $>10^{-4}$  sec) timescale in biology refers to;
- in Fig. 2 provide enough details in the legend to enable its understanding, without going to the source publication;
- in both Fig.1 and Fig. 2 provide info about the original source.