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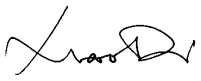
To whom it may concern,

I am very happy to provide this letter on behalf of Dr. Xavier Waintal to support the continuing development of Kwant, a free (open source) Python package for numerical calculations on tight-binding models with a strong focus on quantum transport.

Computational physics has become an important part of modern day research. In the community of condensed matter physics, several high-quality open source packages for electronic band structure calculations exist, such as Abinit and Quantum Espresso. These packages have greatly pushed condensed matter research related to materials. However, there are few packages available for quantum transport, which is essential as the field of nanoelectronics keep growing. Many groups write their own code, even though the basic algorithm is the same. In addition, lots of research time has been spent on writing codes for specific systems, which is quite time consuming. Kwant solves these problems in a highly efficient way. It has an easy-to-use user interface to allow quick build of the tight-binding Hamiltonian for different systems, and the code is well tested to provide reliability. In one of the projects we are working on, my student spend a week to set up the code and finish the calculation. This allows us to quickly move on to analyze the result and focus on the physics. The amount of research time saved by Kwant is enormous–I had a previous student who spent nearly three month to just write a working code for a simple system.

I believe Kwant is an indispensable tool for anyone working in the field of quantum transport. The open source license ensures wide accessibility of the code. I wholeheartedly support the continuing development of Kwant.

Sincerely yours,



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