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To whom it may concern:

I am writing to provide strong support for the QuantEra proposal "AZX — A Flexible Intermediate Representation for Quantum Software". This proposal aims to fill an important gap in the quantum technology development, namely connecting the wide range of proposed hardware architectures with the broad range of software, and it does this through a single interface, an extended ZX-calculus.

The team is the strongest possible, including the originators of the ZX-calculus, Coecke and Duncan, as well as major contributors to the broader field of high-level methods for quantum computing and quantum programming. They include developers of the quantum programming language Quipper (Valiron) and developers of ZX-interfaces between different computational models (Duncan, Perdrix, Horsman, Kissinger). The close alignment with the NQIT hub also makes the team particularly well-positioned to directly impact the development of quantum technologies.

The project could not have been more timely. A string of new applications of the ZX-calculus has recently emerged, like in quantum error correction and lattice surgery.

I am very happy to confirm my commitment to serve on the Advisory Board of this excellent project.

Sincerely,

Peter Selinger