Propositions

accompanying the dissertation

Spin-photon interfaces Enabled by Group-IV Vacancy Centers in Diamond and Single Rubidium Atoms

by

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1. The key to harvest the quantum uncertainty is to eliminate the operational uncertainty (chapter 2, 3, and 4).
2. Within a few decades, business partners will be able to discuss confidential matters over the phone with zero risk of hacking, even when separated by one-fortieth of the Earth's circumference (Chapters 2 and 4).
3. Distributed quantum computing is the only viable path toward connectivity and scalability of quantum computing. (Chapter 3)
4. In a quantum system, leaky channels are not always detrimental; under certain conditions, mutual interference can block them, and they may stabilize fluctuations by acting as a reservoir (Chapter 4).
5. A diligent physicist studies mathematics; a clever physicist circumvents it.
6. A journal article reviewer should get paid.
7. The first traffic fine should be waived.
8. AI hallucinates; humans are prejudiced.
9. Nothing is more tragic than when academia and politics are reduced to jokes.
10. A poor swimmer who doesn't excel in badminton will never be a great Go player.

These propositions are regarded as opposable and defendable, and have been approved as such by the promotor Prof. dr. ir. R. Hanson, Dr. V. V. Dobrovitski, and Dr. J. Borregaard.