## Propositions

## accompanying the dissertation

## Spin-active color centers in silicon carbide for telecom-compatible quantum technologies

- 1. In order to preserve the integrity of the peer-review process for scientific publishing, reviewer-coerced citations should be forbidden.
- 2. For determining the optimal material system as a stationary qubit to be used in a quantum-optical network, it is too early to point out the optimal system. Therefore, the scientific community should at this stage keep a broad scope for this and not direct the majority of funds and efforts towards a single material system that seems to work.
- 3. Everyday life will not be affected by the applications of quantum networks that are currently envisioned. This points to the need to continue research into a broader range of application possibilities.
- 4. Literature descriptions of solid-state impurity systems and their electronic spins are often convoluted and lack an intuitive physical picture. However, all spin dynamics reported in this thesis for the  $Mo^{5+}$  defect can be traced back to its unpaired electron. Therefore, it is fair to conceptualize this defect system as a single localized electron, affected by the SiC crystal field and the molybdenum core ion to which it is bound.
- 5. In order to bring down the ivory tower, academics should adopt a worklife balance that is typical for any full-time equivalent job.
- 6. There is no such thing as an apparent paradox.
- 7. Most human eyes are limited to 4K resolution for typical household television setups (with  $30^{\circ}$  field of view). Therefore, the industrial trend of fabricating TV panels with increasingly higher pixel counts is merely a marketing trick.
- 8. Employment regulations that enforce external advertising of open positions, even when there is a suitable internal candidate, need adjustment because in practice these do not work.

- 9. The OV-chipkaart (a chip-card system used for public transport in the Netherlands) is unnecessarily complicated, in particular regarding the need to check in and out while in transit, upon switching transport companies.
- 10. The bulk of scientific content in a PhD thesis outweighs the additional propositions to the point where the latter are unnecessary.

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