

PROPOSITIONS

for the thesis

FEMTOSECOND MID-INFRARED SPECTROSCOPY OF WATER

(translated version)

1. Physicists are like small children, albeit with more expensive toys.
2. A piano can be considered as a system consisting of 10^3 coupled oscillators in a heat bath.
3. Heavy water tastes sweet.
4. Who darkens the room during a Powerpoint presentation interlarded with visual effects, assumes that his or her presentation can compete with a James Bond movie.
5. A graduated physicist should be able to capture the essence of any physical paper outside his own research area.
6. Literature references can lead a life of their own if no one ever bothers to read the paper—Grothuss was not the inventor of the Grothuss mechanism of proton conduction. [Grothuss, *Annales de Chimie* vol. 58, 54 (1806)]. *Page 98 of this thesis.*
7. *'A frequency of 3400 wave numbers'* is as odd as *'An energy of 10 weights.'*
8. Determining the possibilities is sometimes more difficult than making a choice itself.
9. No correct predictions for the lifetime of a molecular vibration in a liquid have been made on theoretical grounds.
10. What many regard as user-friendliness, is most often a thin layer of would-be artistic sense helps the beginner, but is a restraint for the advanced user.
11. Complicated mathematical descriptions obfuscate flaky assumptions.
12. Town and country planners should be obliged to use a bicycle to travel from home to work.
13. Constructing equations with correct dimensions is harder than one might think. *Chapters 7 and 8 of this thesis.*
14. Frames on web pages render making bookmarks and e-mailing interesting links to friends/colleagues impossible, and interferes with the operation of search engines.

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