Propositions accompanying the thesis

## From intracluster medium dynamics to particle acceleration

- 1. Confirming a shock front in a low density region is challenging and requires detailed modeling of the background. (Chapters 1 & 2)
- 2. Both X-ray and radio observations are powerful to unveil the massive galaxy clusters hidden behind the Milky Way. (**Chapter 3**)
- 3. The connection between the nonthermal and thermal components in the ICM is tight. (Chapters 2 & 4)
- 4. The systematic uncertainty of the measured ICM temperature is high, and should be considered when interpreting the results.
  (Chapters 1, 2, 3 & 4)
- 5. Though space telescopes are free from the Earth atmosphere, observations are affected by chaotic space weather.
- 6. Case studies and sample studies are both important to understand the Universe.
- 7. Documentation, manual and user handbooks of X-ray telescopes are useful for beginners, but are limited for advanced users.
- 8. The power law is the fiducial mathematical expression of the Universe.
- 9. Media should report science discoveries together with confidence intervals.
- 10. Experience helps you but can also mislead you.
- 11. The motivation for astronomical studies is curiosity rather than absurd interstellar emigration.
- 12. Chinese restaurants in the Netherlands are polarized.

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