

Propositions accompanying the dissertation

## **Unveiling planet formation and evolution with dynamics**

1. Mean-motion resonances encode the dynamical history of planetary systems rather than merely describing their present orbital configuration. (Chapter 2)
2. The presence of a well-ordered multiplanet system does not imply simultaneous formation. Planets often form sequentially. (Chapter 3)
3. The Solar System's origin is best understood as a typical outcome of planet formation, not as the special product of tuned conditions. (Chapter 4)
4. Background stars are bullies to baby planets. (Chapter 5)
5. The decisive factor in examining a speculative idea is the willingness to take the first exploratory step. (Chapter 6)
6. Resonance chain is more interesting than resonance pair.
7. The ease with which a paper can be criticized without being read serves as a reminder that scientific judgment is not always grounded in evidence, but is sometimes dominated by strong priors without any evaluation of the likelihood.
8. Artificial intelligence is weakening authentic intelligence.
9. If you can not find your unlocked bike, just walk a few dozen metres ahead. It may have parked itself in front of a bar.
10. Hotpot activities enhance research productivity by strengthening social cohesion within research groups.

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