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Galactic substructures as tracers of dark matter and stellar evolution

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Propositions accompanying the thesis

Galactic substructures as tracers of dark matter and stellar evolution

1. A collection of stellar streams at different Galactocentric distances is necessary for accurate Galactic potential inference. (Chapter 2 and Chapter 3)

2. Streams near their pericentres are unable to efficiently distinguish between different Galactic potentials. (Chapter 3)

3. Interlopers and measurement errors within the stream data do not necessarily affect the accuracy of stream-derived Galactic potential constraints, but they have an impact on the precision. (Chapter 4)

4. We still have a lot to learn about and from our closest open cluster. (Chapter 5)

5. The devil is in the systematics.

6. One of the essential qualities of a good scientist is to recognise when to draw a line under your work and declare the rest to fall "beyond the scope of this paper".

7. Using the tools created by someone else as a black box for your own work can be a double edged sword.

8. There is value in approaching a problem from a new, less conventional angle.

9. A good team is one in which everyone can, and will want to, confidently announce their last week's blunders.

10. One cannot discuss astronomy in their native language without making it seem like their degree has been a hoax.

11. A good team is one in which everyone can, and will want to, confidently announce their last week's blunders.

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