

Propositions associated with the thesis

"Lasers, lenses and light curves: adaptive optics microscopy and peculiar transiting exoplanets"

1. Despite the double-pass effect, both even and odd wavefront modes can be measured with direct wavefront sensing in microscopy. (Chapter 3)
2. Combining feedbacks from wavefront sensing and recorded intensity should be the aim for future adaptive optics implementations in microscopy. (Chapter 3 & 4)
3. Adaptive optics will become as prevalent in microscopy in the future as it is in astronomy today. (Chapter 1)
4. The future of adaptive optics in microscopy requires proper characterisation of tissue aberrations. (Chapter 3)
5. Valorisation happens naturally if science is allowed to run its course; unexpected applications of research will eventually emerge.
6. Training of instrumentalists is vital to ensure the continued availability of high-quality astronomical instruments in the future.
7. There should be more collaboration between different scientific fields to stimulate creative solutions.
8. Given that our funding is often public, our methods, data, and publications should be equally public and not hidden behind paywalls.
9. Scientific publications should by themselves be sufficient to reproduce the published results. Cookbooks could serve as an inspiration for writing scientific publications; the results may not always be as tasty, but should always be as reproducible.
10. For sustained knowledge transfer, academia should distinguish between managers, scientists and teachers.
11. Obtaining a PhD is not so much about research as it is about improvisation.