Propositions accompanying the thesis

Resolving gas-phase metallicity in galaxies

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1. The radial metallicity profile of low redshift galaxies ($z = 0.02$) is closely related to the stellar mass profile. This gives rise to the oft-reported common metallicity gradient.
(Chapter 2)

2. At large radii the metallicity profile steepens in low-redshift galaxies. This transition occurs approximately at the location where a galaxy's disc becomes gas dominated.
(Chapter 2)

3. One must not neglect the impact of spatial variations in the star-formation rate distribution when recovering the metallicity gradients of poorly resolved galaxies.
(Chapter 3)

4. There is a large scatter in the observed metallicity gradients of intermediate redshift galaxies ($0.1 < z < 0.8$). This scatter is not explained by variations of the total star-formation rate between galaxies.
(Chapter 4)

5. Simultaneously studying the stellar mass, central metallicity *and* metallicity gradients of galaxies may allow one to constrain the effectiveness of centrally concentrated outflows to redistribute gas to larger radii.
(Chapter 5)

6. We are now entering the era of large extragalactic surveys, however, we should not forget the importance of small targeted studies.

7. Hosting astronomy conferences in expensive locations is done less in the interest of science and more for the private benefit of astronomers.

8. Given the prevalence of mental health issues in academia, PhD students should receive pre-emptive support and training to combat this problem.

9. Astronomers that consider $z = 0.8$ to be low redshift should occasionally be reminded that this corresponds to time when the Universe was half its present age.

10. The desire to understand more about the universe, and the desire to be the one to discover it are different competing objectives that should *not* be confused.

11. Facts are truths convolved with our (sometimes wilful) ignorance.

12. Scientific knowledge is only the by-product of investment in fundamental research.

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