PROPOSITIONS accompanying the thesis STAR FORMATION AND AGING AT COSMIC NOON the spectral evolution of galaxies from z=2

- 1. The strength of nebular emission lines increases with redshift, and decreases with color and mass. (Chapters 2 and 5)
- 2. The observed decrease of star formation rates from z=2 is faster than that predicted by semi-analytical models. (Chapter 2)
- 3. Optical/near-infrared selected quiescent galaxies have at least 20-30 times less star-formation than that of star forming galaxies at the same redshift. Dead galaxies are really dead. (Chapter 3)
- 4. Our knowledge of stellar population parameters of galaxies at high redshift is limited by uncertainties in the stellar population models as much as by the availability of observations. (Chapter 4)
- 5. At a fixed mass, red star-forming galaxies are on average older and dustier than blue star-forming galaxies. (Chapter 5)
- 6. Connecting a galaxy with its progenitors is one of the biggest challenges to our understanding of galaxy evolution.
- 7. The acquisition of new observations is often an important step in finding additional insights into already existing data.
- 8. Visualizing scientific results in an effective and visually appealing way is as important as obtaining the results themselves.
- 9. Without smart people, big data are dumb data.
- 10.Playing in a band should be a compulsory exercise for learning how to work effectively in a team.
- 11. Traveling by airplane makes us forget the real extent of the world.
- 12.Statistics of employment and future career paths of previous PhD students and postdocs should be made available to students applying for positions in a research group.
- 13. As most PhDs are funded by taxpayers, using the competencies learned during a doctorate outside academia is ultimately a service back to society.

Mattia Fumagalli Leiden, 8th September 2015