Propositions associated with the thesis

"Imaging polarimetry for the characterisation of exoplanets and protoplanetary discs".

1. Polarimetry should be fully implemented in the next generation of high contrast imaging instruments for the characterisation of exoplanets and protoplanetary discs. *(Chapter 2, Chapter 3)*
2. If a planet is responsible for the structure observed in transitional discs, the combination of polarimetric and interferometric images at visible and sub-mm wavelengths can constraint properties such as mass and position. *(Chapter 3)*
3. It is important to study the impact of the environment in which a protoplanetary disc evolves if we want to fully understand the process of planet formation. *(Chapter 4)*
4. The proper implementation of polarimetric capabilities in a telescope like the E-ELT entails the addition of a retarding element at its intermediate focus. It is worth it. *(Chapter 7)*
5. It is a mistake to relegate polarimetry to the add-on category of observational capabilities of instruments and telescopes.
6. The goal of a model is to provide physical understanding. Parametric models are a valuable tool but they cannot describe the physics behind the observations and they should not be the end-point of a modelling task.
7. Astronomy, as every other field in science, should move on to an open-source philosophy. Knowledge should not be anyone's property.
8. It will be very beneficial to the field of circumstellar discs and exoplanets to keep aware of the advances in fields like star formation and young stellar clusters. Focusing too much can cause the loss of perspective.
9. The academic system should differentiate between scientists, managers and educators if it wants to optimise the transmission of scientific knowledge and skills from one generation to the next.
10. Politicians and political strategies should be kept away from education and, by extension, science.
11. One of the main problems of society is the lack of honesty.

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Liverpool, 28th of October, 2013