# Clues from stellar catastrophes

Rimoldi, A.J.

**Propositions associated with the thesis**

# "Clues from Stellar Catastrophes"

1. Supernova remnants can be used to infer properties of supermassive black hole environments, such as the nature of the accretion flow (Chapter 2).
2. The emission from core-collapse supernova remnants can be a substantial contribution to X-ray observations of the environments of quiescent supermassive black holes (Chapter 3).
3. Close companions of Type Ibc supernovae can receive a substantial kick in velocity and removal of mass; this is in part dependent on the nature of the ejecta, and therefore simple extrapolations from results for other supernova types cannot be relied upon (Chapter 4).
4. Modelling blue straggler formation by stellar collisions is crucial for understanding the complexities of this elusive population, and consequently the evolutionary history of globular clusters (Chapter 5).
5. The presentation of figures is important not only for conveying your work, but also because it is a likely means to fool other people—or yourself.
6. Extraordinarily positive claims in press releases may help garner fame or funding for the researcher, but they risk harming the credibility of research and public understanding of science.
7. Negative results, or the confirmation of repeatability of previous results, should not be unpublishable.
8. It is dangerous to science to discourage doubt, and setting it against confidence is a false dilemma.
9. The de facto standard of reliance on proprietary software and services is squandering the potential of modern technology.
10. No idea or claim should be granted immunity from criticism.
11. Anyone who dreams of going into space ought to try scuba diving.

Alex Rimoldi
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