



Observer's guide to stellar evolution

by Mike Inglis

Springer Verlag London, 2003
(*Patrick Moore's Practical Astronomy* series). ISBN 1-85233-456-7. Pp xvii + 236, £26.95 (pbk).

Here is another book by a friend and colleague. With this one I could take revenge, because Mike Inglis marked my assignments when I was a student at the University of Hertfordshire.

In a way, this is a quart in a pint pot; the series is 'Practical Astronomy' and the main subject has an awful lot of attached theory. Mike tackles this at an unrelenting pace with an upbeat, encouraging tone.

It is a handbook, rather than a good read; it is packed with information and dozens of star maps and diagrams (plus a small selection of full colour plates at the back). At times I lost sight of the star in question with so much information and so many names. This does not apply to the less-well-known, which are the vast majority of the examples. I spotted one error: '...the Sun, which loses about $10^{-4} M_{\text{sun}}$ a year...' This is several orders of magnitude too high.

It is the first book I have read to beat James Kaler's *Stars* for the number of HR

diagrams and they are all well used. Mike shows us how stars are formed and where to see them. He does not stint on examples: it would take many weeks of favourable weather to follow up even a good sample of his tips. We see stars in their vigorous prime, when they sit on the Main Sequence and shine by simple hydrogen fusion, which he describes carefully. There are different types of stars, quite sharply delineated by mass. As these celestial luminaries age, their fates diverge: massive stars explode; medium mass stars undergo convulsions to become white dwarfs with brief, often pretty, planetary nebulae; low mass stars just fade away.

I am really indebted to section 4.16 which gives a brief, unambiguous description of the different supernova types. This is one I can recommend to my OU students. In the end, I suspect the studious may make more use of this book than the observant, but such is fate. I am glad I have my copy to refer to.

Roger O'Brien

Roger is still finding classes who want to learn about astronomy and cosmology. There must be a lot of it about and it is evidently incurable as he got bitten by the bug in 1955.

This review is copyright © the *Journal of the British Astronomical Association*, www.britastro.org/journal. If you wish to reproduce it, or place it on your own Web page, please contact the Editor: Mrs Hazel McGee, hazelmcgee@compuserve.com