The Stellar Populations of Galaxies, edited by B. Barbuy & A. Renzini (Kluwer, Dordrecht), 1992. Pp. 521, 9½ × 6¼ inches. Price £82/$139 (paperback; ISBN 0 792 31699 1).

Just as the astonishing complexity of a fractal shape can be understood as the repeated application of a simple rule, so too the complexity of the make-up and motions of the stars in galaxies and clusters can largely be understood through the repeated and elaborated application of the concept of stellar populations. This book, the proceedings of IAU Symposium 149, is fractal-like in its contents as well as its subject, showing interesting structure on all scales from reviews down to poster papers. Here are brief but cogent reviews of the halo, bulge, disc, and dark populations, of chemical evolution, of galaxies at low and high redshift, and also sharply-pointed comments on topics as various as searches for primæval galaxies and new theoretical isochrones. Perhaps the most appealing aspect of these proceedings is that, even in the review sections, they are very consciously a report on work in progress; everywhere questions are posed, controversies aired, and lines of inquiry foreshadowed. As a current snapshot of a broad swathe of mainstream astronomy it could hardly be bettered, and will prove invaluable to anyone in the field who seeks not only an up-to-date picture of work on stellar populations but also new insights, garnered from those corners of the subject that, somehow, one never had time to investigate before. — MATTHEW COLLESS.

Dynamics of Disc Galaxies, edited by B. Sundelius (Göteborg University), 1991. Pp. 415, 9½ × 6¾ inches. Price £19/$35 (paperback; ISBN 9 170 32630 4).

Not having had the good fortune to attend this conference on disc galaxies in 1991 May, I was pleased to have the opportunity to examine the conference proceedings in detail. My first impression is that it must have been a very pleasant meeting, to judge by the tolerance of the Editor/organizer! This is a densely-packed volume, and if the trend to use smaller letters when presented with a paper which won't fit the requested length is continued, things could get out of hand. Fortunately magnifying glasses aren't yet necessary.

The subject is comprehensively covered, the volume being structured round invited reviews on stellar and gaseous (ionized and molecular) observational properties of discs (though everywhere throughout the volume they are referred to as "disks" — I wonder why the cover got the anglicized version?), discussions of the stability of discs, both small- and large-scale, bars observational and theoretical, vertical motions in terms of velocity dispersions and warps, spiral structure from several different points of view, and disc-formation mechanisms. The Editor provided a graceful little historical reminder of the origin of calculations of disc-system interactions in a description of Holmberg's light-bulb analogue 'computer'.

I was struck by the difference in style adopted by various reviewers. The articles by Freeman and Bosma read very much as updates for the initiated (which I suppose the attendees at such a meeting might well be expected to be, though not necessarily all the readers of the proceedings. However, in the interests of keeping the length of the proceedings under control...), with emphasis on new results on thick discs, falling rotation curves, opacity in spiral discs, and warps. This contrasts sharply with Kuijken and Tremaine's lengthy and pædagogic article on local kinematics and oscillations of the Galactic disc;