radio spectral lines, the neutral and ionised gas seen in optical and UV absorption lines, cosmic rays and magnetic fields are described in detail and the spatial distribution is explained. The dynamics of the features cannot be explained by any one model; infall, winds, galactic fountains, interaction with the Magellanic clouds and simple galactic rotation are discussed. Work on nearby galaxies, particularly the edge on spiral NGC 891, is reviewed. Massive neutrinos are not tackled.

The volume provides a substantial foundation for someone wishing to start work in this fascinating field, and is recommended as a reference source. The style is straightforward and explains any jargon. I would expect it to be accessible to a good final year undergraduate with a background in galactic structure and the interstellar medium.

Astronomy Group of
the University of Leicester
at Leicester

D. J. ADAMS


This book contains the proceedings of an excellent specialist workshop on sunspots. It is unusual in that it contains only invited reviews, and that these were carefully selected and improved in an informal refereeing procedure; in addition, the editors supply an extensive, well-documented overview of the field by way of an introduction. The result has more the character of a high-level textbook than of a meeting report; it will have longer-lived value than most other proceedings. It represents a welcome update to the classic monograph on sunspots by Bray and Loughhead and belongs in every astrophysics library.

Sterrekundig Instituut Utrecht

R. J. RUTTEN


This book is a remarkable book, collecting all information on our nearest neighbor spiral galaxy. Hodge, himself an expert and longtime researcher on M31, has surveyed and systematically discussed all publications on it up to the end of 1991. The lay-out of the book is very clear. Tracing the history up to about the seventies in the first three chapters, he continues first to describe the overall properties (optical,