

Science

The Milky Way: An Insider's Guide

William H. Waller Princeton University Press 978-0-691-12224-3 (April 21, 2013)

Approachable guide to the science of our solar system is an enthusiastic love letter to the stars.

In the preface of *The Milky Way: An Insider's Guide*, William Waller describes his childhood encounter with an unobstructed view of the night sky and the accompanying sense of wonder he felt upon truly seeing the stars. That seminal encounter fostered within him a lifelong fascination with the Milky Way and astronomy. It also provided the impetus for his choice of profession, leading him to study and explain the origins and structures of the firmament as an astronomer and instructor.

Thankfully, it's that sense of childlike awe, and the wish to share his enthusiasm for the many wonders overhead, that inform every page of the erudite yet eminently accessible *The Milky Way: An Insider's Guide*.

Another component of the author's winning strategy is evident in the book's subtitle; it's the most immediate example of Waller's playful use of language and engagement of the reader's imagination. That two-pronged approach—apparent in the pop-culture-referencing epigrams opening each chapter and his invoking of a magic carpet ride through our immediate stellar neighborhood in the opening pages—helps make this book a joy to read.

As Waller quickly points out, our world—indeed, our entire solar system—is but one of the billions inhabiting the titular galactic structure. But while there are plenty of mathematical formulas, graphs, and hard facts offered to support the findings and theories recorded here, Waller's accompanying explanations of these concepts are so clearly rendered that there's no denying that this volume is, first and foremost, intended for the general public.

But this is no simple-minded guide to the stars and their companions. Rather, it's a grand anatomy of the stars, their immediate environ, and the larger structures that constitute the Milky

Way. However, everything remains rooted in humanity's generational relationship to, and everincreasing understanding of, the surrounding stellar and galactic systems.

This enables the reader to follow the progression of accumulating knowledge, from ancestral stargazers to present day observers, while gradually gaining greater insight as one theory is confirmed or supplanted by another in the ongoing pursuit of verifiable truths. Thus, the reader's understanding of the natural history of the Milky Way grows while their grip upon the core principles and values of the scientific method is simultaneously strengthened.

Still, Waller's book is no pro-science screed. Rather, it is a love letter to the stars above, distant mysteries capable of evoking wonder and awe in us all.

Bill Baker