Bessel, but his own measurements are neither mentioned in his publications nor in the surviving manuscripts. On page 183 we learn that the galaxy NGC 7320, located in the foreground of Stephan's Quintet in Pegasus, is a member of the Virgo Cluster. This is ridiculous — the galaxy cluster is located on the opposite side of the sky! On page 255 the violation of "CP parity" is mentioned. However, because CP already stands for "charge and parity", we have an unnecessary repetition. Chapter 13.3 is titled "Supersymmetry and Symmetry Breaking" but the latter subject is not treated.

It looks like I'm pretty pernickety. Some problems are certainly a matter of opinion, but ultimately there are too many errors for such an ambitious book. The reader should expect a flawless and consistent presentation. — WOLFGANG STEINICKE.

More Than Curious: A Science Memoir, by William H. Press (Darwin-Finch Publishing Company), 2023. Pp. 589, 22·9 × 15·2 cm. Price $15 (about £12) (paperback; ISBN 979 898954972 6).

I've never met Bill Press. I've never corresponded with him. I've seen him once.* But after having read this book, I feel that I've known him all my life, or even all his life. At 589 pages, this is a rather long memoir, but it is the short version. A longer one, with more details on things probably of interest only to his family but also containing things he doesn't want made public until after all concerned will have died, is in escrow and will be made available "someday... but not soon". Maybe I'll live that long. At times, I thought that I must have got the long version by mistake, as the memoir is very candid. (Whether it is honest can be judged only by those involved, though I do recognize many of the names and have met some of the corresponding people and in those cases Press's descriptions usually jibe with my experience, even if separated by decades — some folks never change — so perhaps I can assume that the rest is equally honest.) Feelings are probably mutual, as I've heard some stories about Press which I won't repeat here.

Press was born in 1948 in New York City, of Ashkenazi Jewish heritage, moved with his parents to California in 1955 (his geophysicist father Frank becoming a professor at Caltech; in 1965 he moved back east to MIT), attended Harvard as an undergraduate, was a doctoral student at Caltech (with Kip Thorne), briefly a postdoc at Caltech, an assistant professor at Princeton, a professor at Harvard from 1976 (when he became the youngest professor up until that time) to 1998 (and 1982–1985 chair of the astronomy department). He then went on to become deputy laboratory director at the Los Alamos National Laboratory (LANL) before moving to the University of Texas at Austin in 2007 and switching fields somewhat, becoming a professor with a joint appointment in the computer-science and integrative-biology departments. He and his first

*That was at a conference in Melbourne in 1995 where, before his talk, he introduced himself to the audience as the front end of the Press–Schechter horse. Paul Schechter was sitting in the audience behind me. It was a conference on gravitational lensing. There was a debate about the value of the time delay between variations in the two images of the gravitationally lensed quasar 0957+561, the first gravitational-lens system discovered[1], with a shorter delay implying a larger Hubble constant and *vice versa*. (That mirrored the general debate about the Hubble constant; at the time the 'tension' was between 50 and 100 km/s/Mpc.) Press was wrong in that case. I was watching from the wings while the Hamburg group got it right[2,3]. Most have probably forgotten that now; perhaps more will remember his quip, still true today, that someone knows the Hubble constant to two significant figures, but we don't know who that person is. To his credit, Press, in an aside to another story involving potential extraterrestrial intelligence, admits that his two papers on this topic were "just incomprehensibly *wrong*" [his emphasis].

June Page 2024.indd 150 13/05/2024 08:29

wife Margaret were both children of Caltech professors. He also worked at the Lawrence Livermore National Laboratory as a doctoral student, working for, among others, Edward Teller. He was later science advisor to Obama (his father had been the same for Kennedy, Johnson, Nixon, and Carter). He was one of the players in the revitalization of relativistic astrophysics in the 1960s and 1970s, working on a wide variety of topics. He is perhaps best known, at least to those outside of his fields, as one of the authors of *Numerical Recipes* (a book about various numerical algorithms, including explanations and working coded examples).

The book consists of seventy chapters centred around various topics, though they usually refer to more than just the topic in the title. It is mostly chronological, though occasionally there are flash-forwards. It is well written, funny, and provides an insider's view of many interesting events. The more one knows about the fields Press has worked in and the people involved, the more one will get out of it, but probably most readers of this *Magazine* would enjoy reading it (except perhaps those bits about themselves which are perhaps a bit too candid). Unlike many (auto)biographies with many more pages per year when the subject was young than later on, the level of detail is roughly constant throughout the book, though the emphasis is sometimes different (for example, the reader learns much more about Press's first wife than about his second).

Press fills us in on topics such as internal discussions of hiring committees in academia, field trips with the CIA as a member of JASON (a group of advisors to the US military), conferences behind the Iron Curtain, and internals from various consultant groups to the US Government, although it is never clear if all the reasons as to why he was selected to so many posts are actually mentioned; connections certainly played a role: "I always found the level of inbreeding at this level of scientific leadership staggering, even when benefitting from it." The following anecdote describes his status in such circles: "When I walked around the table to introduce myself, Gene Fubini was amused. 'Bill, you've reached a level where you don't have to say who you are. Just sit down and say, General, I am glad that you can be here with us today.' "

Membership in various advisory committees at times gave Press, as far as protocol was concerned, the rank of a one-star general or admiral. As the years go by, Press spends more time on government consulting and less on science, hob-nobbing with the elite of US society in business, the military, and academia; his memoir might set a record for name-dropping. But he is also honest about himself: when invited to a black-tie affair, he asks the CIA if there is a rosette associated with the gold-plated medal so that he could wear the former. There wasn't, as "most recipients don't want to advertise the fact".

His extracurricular activities meant that by the time he was gently kicked out of LANL, he had become out of touch with astrophysics. While still at LANL he had joined a statistics group in order to do 'real work' after his management career had ended. His long-time mentor John Bahcall encouraged him to talk to the biologists at the Institute for Advanced Study, possibly because Bahcall was suffering from a rare, fatal blood cancer (though his colleagues didn't know it at the time). His background as "an astronomer doing biology in a statistics department", together with his connections, led to his being recruited by the University of Texas at Austin by someone (the dean) whom he had never met, in an effort to re-establish a statistics department, getting tenure and $1 million start-up money (in addition to a chair endowed to the tune of $2 million) despite having only two published papers in biology. His connections pulled him, in 2009, into membership (and later one of the two Co-Vice Chairs) of

the President's Council of Advisors on Science and Technology, meeting with Obama for an hour or so about three times a year, and later to the post of treasurer of the American Association for the Advancement of Science. The last two chapters provide a close look at the transition from the administration of Obama to that of Trump and Press's response to COVID (with which he might have been infected), which included writing the book during the lockdown, before a twenty-one page small-print index ends the book. (The book otherwise consists of a preface and seventy occasionally sectioned chapters; there are no footnotes or figures, and language and style are very good; Press credits Kip Thorne with teaching him how to write.)

Although also published as a traditional book, Press has chosen to publish it *via* Creative Commons License CC BY-NC-ND 2.0, which means that anyone can redistribute it (even commercially) as long as credit is given and it is reproduced in its entirety. It is thus legally available as an eBook in various formats (including PDF — which I have — which presumably corresponds in appearance to the printed version). I'm sure that he doesn't need the money, and the book will thus reach an even wider readership.

All interested in the history of academia in general and astronomy in particular in the last sixty years will surely benefit from this memoir, a real page-turner which is not only highly entertaining but also from which almost everyone will learn something interesting. There isn't much time left, but I would like to see similar works by others of Press's generation (and, later, by younger people, though my guess is that, for various reasons, Press's generation of astronomers probably had the most fun). — Phillip Helbig.

References

(1) D. Walsh, R. F. Carswell & R. J. Weymann, *Nature*, **279**, 381, 1979.
(2) J. Pelt *et al.*, *A&A*, **286**, 775, 1994.
(3) J. Pelt *et al.*, *A&A*, **305**, 97, 1996.

Accreting White Dwarfs: From exoplanetary probes to classical novae and Type Ia supernovae, by Edward M. Sion (IoP Publishing), 2023. Pp. 233, 26 × 18·5 cm. Price £120/$159 (hardbound; ISBN 978 0 7503 2040 5).

Author Edward M. Sion of Villanova University begins this volume beautifully, with a chapter on what is known about non-accreting white dwarfs. There are all the familiar equations for degenerate matter (relativistic or non-relativistic), the Chandrasekhar limit but Chandra is not cited, only a 2007 book ascribed to Ostlie & Carroll (though the reference list says Carroll & Ostlie), the historic cooling curve, ways of holding metals in atmosphere *versus* letting them sink, and so forth. There is also a wonderful colour–magnitude diagram for 15 000 white dwarfs as observed by *Gaia*. The bright ones track a cooling curve for CO stars of 0·8 $M_{\odot}$; a second concentration appears at around A0 following a track for a mass around 0·75 solar masses; and the cool, faint end turns up, as expected from extra energy input when the CO core starts to crystallize. The author claims this as the first empirical evidence for the phenomenon.

This chapter, the ensuing six, and two appendices, however, suffer from the now-common problems of no unified list of references and no index of any kind. Those 15 000 white dwarfs do not all appear individually, but very many stars do, and I was left wishing that Chapter 1 had included a paragraph on "naming of white dwarfs." Quite a few of the accreting ones are variables, with decodable names like WZ Sge, V471 Tau, and U Gem. SDSS is recognizable as

June Page 2024.indd 152 13/05/2024 08:29