expanded into and cited as NIST ASD (National Institute of Standards and Technology, Atomic Spectra Database).

Of course there have been tremendous advances this century and literally billions of spectrum lines have been measured or calculated by someone or other. How far have we succeeded this century in turning "chaos into order", as Moore-Sitterly did in the last? There have been many compilations, some small, some vast, of spectroscopic data, and the modern user of spectra has to know where to turn to find these data. It is for this reason that any user of laboratory astrophysical data (atomic and molecular spectroscopy, astrochemistry of small and large molecules, oscillator strengths, collision rates, aerosol data) will need this book. Herein are to be found descriptions and whereabouts of all such compilations and how to use them. Also described are the many intrinsically useful quantities for which accurate laboratory data are not yet determined. There is much work yet to be done in laboratory astrophysics, and this volume should give young researchers some profitable ideas.

I have only one tiny disappointment. I see that most of the authors are still using the old term "transition probabilities" for what are better termed Einstein A coefficients. The Einstein coefficient is not in any sense a "transition probability" such as is used in probability theory. It is much more akin to the decay constant of a radioactive nuclide with dimensions T^{-1}.

Included as well as compilations of laboratory data are the capabilities of large telescopes (such as the *Very Large Telescope* (*VLT*) and the *Extremely Large Telescope* (*ELT*)) and their associated spectrographs. For example, one of the échelle spectrographs of the *VLT* is capable of measuring radial velocities with a precision of 10 cm s^{-1}. In units that we can understand, that is about 0·22 miles per hour, corresponding to a Maxwell–Boltzmann kinetic temperature of hydrogen atoms of 0·4 μK. I don't know whether astronomers can really make use of such exquisite precision.

This book will cost you about 83 pence or US$1·45 per page, and it is well worth every penny of it. I don't know how many copies were printed in excess of those needed by delegates to the symposium, but you should hurry to get a copy before they run out. — Jeremy B. Tatum.

Robert Hooke's Experimental Philosophy, by Felicity Henderson (Reaktion), 2024. Pp. 183, 22 × 14·5 cm. Price £17·95 (hardbound; ISBN 978 1 78914 954 8).

The latter part of the 17th Century was an exciting time for science in Britain. The freedom of thought encouraged by the Restoration led to many things, including the foundation of the Royal Society, the establishment of the Royal Observatory at Greenwich, and the remarkable advances made by Isaac Newton. It also witnessed the rise to prominence of the amazing polymath Robert Hooke, often just remembered for his Law (on the extension of springs) and the row he is said to have had with Newton over the Law of Gravity. There was, however, much more to Hooke than that. He was interested in *everything* and his Experimental Philosophy was built on applying his vast knowledge to every problem. His practical expertise came from his work as the Curator for the Royal Society, which meant demonstrating all manner of experiments and processes before an audience of his peers; for that task he was perhaps the first salaried scientist. He gained insights from innumerable conversations with manufacturers in their factories and fellow scientists in the coffee houses of London. And he was a first-rate artist as shown by the astonishing drawings of a range of subjects viewed through his microscope.

The present delightful book by Felicity Henderson details Hooke's career from his birth on the Isle of Wight to his death in London at the age of 67. It's a fascinating read and very modestly priced — David Stickland.

Lunar. A History of the Moon in Myths, Maps + Matter, edited by Matthew Shindell (Thames & Hudson), 2024. Pp. 256, 37 × 27 cm. Price £50 (hardbound; ISBN 978 0 500 02714 1).

This is a very magnificent book to own in terms of its historical coverage, Moon lore, graphics, and the sheer scale of this work. You certainly need widely vertically spaced shelves in order to fit this book onto a book shelf, and it's good value at just £50. The main theme of the book celebrates the pioneering efforts by United States Geological Survey (USGS) geologists and cartographers to map the Moon's geology in the 1960s–1970s, initially through Earth-based telescopes, and later using *Lunar Orbiter* and Apollo imagery. So these maps are not surprisingly the main colourful theme pervading the book; I only wish they were larger at times in order to make their wealth of detail more visible. But in view of the large size of the original maps, this is not possible. Interspersed between the map pages are nuggets of fascinating information about old telescopic observations, spacecraft imagery, the Moon in multi-cultural folklore, paintings, and movies, *etc.* Unsurprisingly, with modern-era lunar missions, there are now more up-to-date geological maps, but what is shown here is still a good basis for selenophiles to brush up on their geology and a great place to find nuggets of interesting facts for lectures or the media. Although the book is very comprehensive and wide-ranging in terms of its coverage, it may have missed out, though, on the opportunity to mention the work of US Army and USAF cartographers, such as James Greenacre, who, spent many hundreds of hours, often during very cold nights, sketching the Moon at the eyepiece end of the Clark refractor at Lowell Observatory, Flagstaff. Their work formed the basemaps on which the colourful geological maps were overlaid. However, I guess it is not possible to mention everyone who contributed to the USGS map series and the author had to be very selective.

Anyway, I am sure that *Lunar*, through its addictive graphics and illustrations, will inspire many readers to take a greater interest in the Moon, especially now with the run up to Project Artemis in the next few years. — Anthony C. Cook.

Einstein and the Quantum Revolutions, by Alain Aspect (University of Chicago Press), 2024. Pp. 95, 19 × 12·5 cm. Price £13/$16 (hardbound; ISBN 978 0 226 83201 2).

Alain Aspect shared the 2022 Nobel Prize in physics with John Clauser and Anton Zeilinger for their independent but complementary work involving entangled photons, which experimentally demonstrated the Bell inequalities and led the way to quantum information science. That is certainly one reason for the publication of this little book (less than eighty pages of main text, small format, large print). However, it was originally published as an essay, in French, in 2019 in the collection *Les Grands Voix de la Recherche* which presents the work of the winners of the CNRS Gold Medal (given in all fields of science and one of the highest scientific awards in France). It is nice to have a description of this very topical subject in the (translated) words of one of the main players in the field. It is aimed at a very general readership and in terms of style, level of content, and even with regard to the physical book, reminds me of another book[1] reviewed in these pages[2], also a book for a general readership written by a practising physicist.