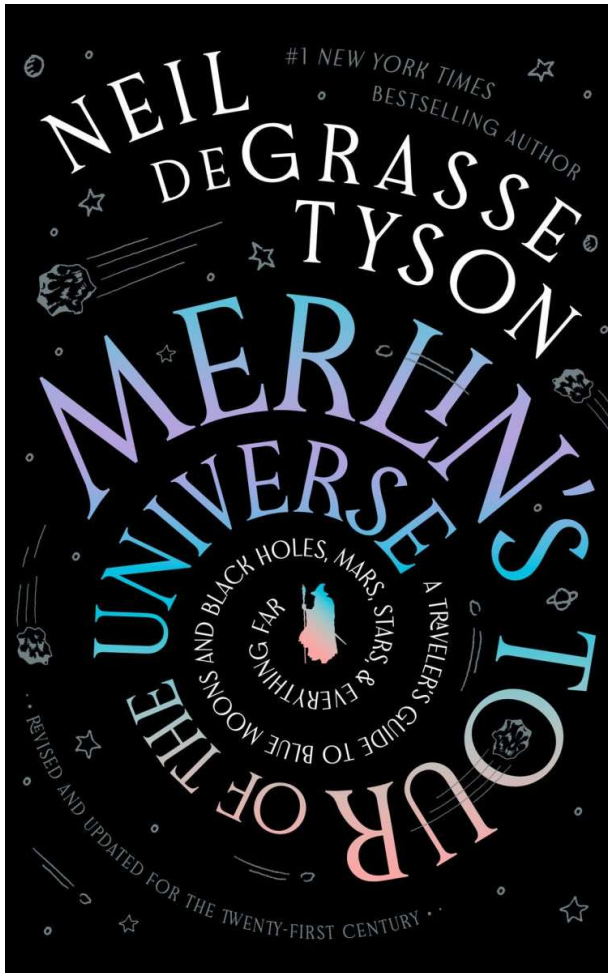


‘Merlin’s Tour gives deep understanding of astrophysics

Posted: Sunday, November 2, 2025

“Merlin’s Tour of the Universe, Revised and Updated for the Twenty-First Century: A Traveler’s Guide to Blue Moons and Black Holes, Mars, Stars, and Everything Far” by Neil deGrasse Tyson. Ashland, OR: Blackstone Publishing, 2024, 304 pages, \$29.99 (hardcover).



“Merlin was born nearly five billion years ago on the planet Omniscia – one of a five-planet system in orbit around the star Draziw, two and a half million light years away in the Andromeda galaxy,” Neil deGrasse Tyson explains at the beginning of “Merlin’s Tour of the Universe, Revised and Updated for the Twenty-First Century: A Traveler’s Guide to Blue Moons and Black Holes, Mars, Stars, and Everything Far,” his most recent New York Times bestseller. “Merlin’s birth coincided with the formation of the solar system in the Milky Way galaxy that contains planet earth.”

“Merlin was born in Omniscia at the same time the solar system was born to the Milky Way, sparking a lifelong interest in our galaxy,” he continues a little farther into the Introduction. “This led Merlin to take a keen interest in scientific thought as conceived by humans on planet earth. Merlin noticed that humans were curious about the scientists’ understanding of the universe, but many did not know where or how to find accurate answers to their questions. Sharing knowledge and wisdom is as fundamental as acquiring knowledge and wisdom. Merlin chose to visit Earth and spread science to those humans who share, along

with all Omniscient, that unquenchable cosmic thirst.”

So begins one of the more innately interesting books I have had occasion to peruse in recent memory. The entire manuscript is conceived as a series of queries to Merlin from curious humans across the country. The very first one is something many of us have thought about from time to time; it’s posed as follows:

“Jonathan Swann” (from San Diego, California) ask: “What would happen if Earth suddenly stopped rotating?”

The response from Merlin: “Among other things, all of us and anything else not nailed to Earth’s surface would fall over and roll due east at about 800 miles an hour.” He then goes on to describe some of the other consequences, in a humorous yet informative manner you get used to as you make your way through this entertaining little volume.

“Merlin’s Tour” consists of a Preface and Introduction, followed by 13 relatively self-contained chapters and a Postscript. The narrative is written in a conversational style obviously intended for a

wide audience with minimal background in the subject matter Tyson knows so well. I also appreciated the catchy illustrations scattered liberally throughout the text, which, as alluded to previously, complement the question-and-answer format that forms the architecture on which the book is constructed. Simply put, this one was a pleasure to read.

As an example, in “Sun,” the fifth chapter, a question relates to the variation in how hot the sun is at various points. In this enlightening segment, “Andrew J. Smatko, M.D.” (from Santa Monica, California) asks “I am told that the Sun’s corona is millions of degrees while the visible surface is just 10,000 degrees Fahrenheit. How can this be? One would think that the farther one is from a source of heat, the cooler the temperature becomes.”

Merlin’s response: “Detailed studies of the Sun’s spectrum reveal rapid oscillations and pulsations in the visible edge of the Sun that send shock waves into and through the corona. Those shock waves, independent of the Sun’s core energy sources, efficiently heat this rarefied gas to two million degrees Fahrenheit.”

It doesn’t take long for the reader to see what an effective teaching mechanism Tyson is employing to educate readers. If he had simply written a straightforward book dealing with these scientific processes and principles in essay form, it would have been considerably less appealing and a lot more boring. But having the mythical Merlin answer questions a lot of us started asking in elementary school turns what could be fairly mundane into a fascinating quest for deeper understanding.

The Frederick P. Rose Director of the Hayden Planetarium at the Rose Center for Earth and Space, Tyson is also a Research Associate in the Department of Astrophysics at the American Museum of Natural History. In 2017 he was the first American to win the prestigious Stephen Hawking Medal for Science Communication. The host of NOVA ScienceNow on PBS from 2006 to 2011, Tyson is the author of several previous books, including “To Infinity and Beyond,” with Lindsey Nyx Walker, and “Welcome to the Universe,” with J. Richard Gott and Michael A. Strauss.

Although I enjoyed most of “Merlin’s Tour” immensely, I’ll have to admit the final question made me smile more than usual and seemed to be a fitting conclusion:

At the end of the book, “William James” (from Cincinnati, Ohio) asks “I like to read about the possibility of planets elsewhere in the universe that are similar to Earth. Given the unwillingness and reluctance of people in this and other countries to accept persons of different race or ethnic backgrounds even though we are basically the same, how do you think we would receive intelligent life from another world that might be totally different from anything we know?”

The reply: “There is some hope. Earthlings seem to have accepted Merlin from the Andromeda galaxy.”

Touché!

As Kenneth George notes in his review on Amazon: “This book gives a deep understanding of the principles of astrophysics, which is a highly complex subject. It uses a series of questions that are asked of Merlin, a visitor from another galaxy, which are then answered with easy-to-understand language that is delivered with humility and humor. Neil DeGrasse Tyson is always brilliant as well as funny.”

I could not agree more. Highly recommended.

Reviewed by Aaron W. Hughey, University Distinguished Professor, Department of Counseling and Student Affairs, WKU.