

NEW BOOKS & MEDIA

Across the Airless Wilds

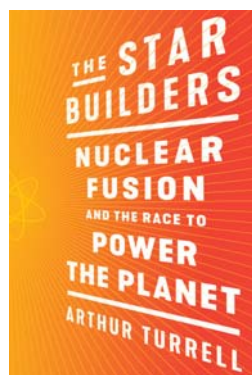
The Lunar Rover and the Triumph of the Final Moon Landings

Earl Swift

Custom House, 2021. \$28.99

The lunar rover is one of “a few Holy Grail items of Apollo history,” writes journalist Earl Swift in his new book *Across the Airless Wilds*. A remarkable feat of engineering, the rover allowed humans to cover as much ground as possible on the Moon and to reach “the edge of the edge of man’s travels as a species.” *Across the Airless Wilds* serves as a paean to NASA’s “spacecraft on wheels,” providing a detailed history of its genesis, construction, and use. By focusing on some of the memorable people involved and visiting sites such as the US Space & Rocket Center in Huntsville, Alabama, and astronaut training grounds near Flagstaff, Arizona, Swift brings the story of the rover to life.

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The Star Builders

Nuclear Fusion and the Race to Power the Planet

Arthur Turrell

Scribner, 2021. \$28.00

As the joke goes, commercially viable nuclear fusion reactors are always 30 (or 50) years away. Despite the ridicule, the dream of a feasible source of fusion power remains alluring because such reactors promise a near-limitless supply of carbon-free energy. In his new book *The Star Builders*, plasma physicist and science writer Arthur Turrell argues that fusion research is necessary to address

the climate crisis because renewable energy won’t be able to provide enough power for the entire world. Turrell profiles fusion physicists—whom he poetically calls “star builders”—in academia, in industry, and at research centers like ITER, the international prototype fusion energy reactor under construction in France. In his view, net energy gain from fusion will be achieved soon, and the bigger problem will be quickly deploying fusion power worldwide.

—RD

Fathom

Drew Xanthopoulos

Apple TV+, 2021

Fathom started off as an investigation into science and evolved into a film about women in science, according to director Drew Xanthopoulos. The two main subjects, Michelle Fournet and Ellen Garland, are whale researchers, and the documentary follows them in the field. Fournet’s research is based in Alaska, where she records humpback-whale songs and tests to see if responses back can cause a reaction. Garland, on the other hand, is based on a research ship in the waters off French Polynesia, where she looks for insights into how new whale melodies propagate across the globe. Featuring beautiful camerawork and superb visuals that convert acoustics into memorable images, *Fathom* is a great introduction to bioacoustics. It captures the trials, tribulations, and occasional loneliness of field research remarkably well.

—PKG



Tsunami

The World’s Greatest Waves

James Goff and

Walter Dudley

Oxford U. Press, 2021. \$34.95



Authored by tsunami researchers James Goff and Walter Dudley, this new book focuses on the science and history of those destructive waves. It is a call to arms: Although hurricanes and famines may get more attention, the book points out that tsunamis have been some of the most destructive natural disasters in history. Few are likely aware, for example, that the deadliest disaster of the 21st century was probably the 2004 Indian Ocean tsunami, which killed an estimated 227,898 people. At that time, there was no early-warning system for tsunamis in the Indian Ocean, which meant that millions of people were taken by surprise when the wave hit. Blending science with interviews of survivors, *Tsunami* warns us to be prepared for future tidal waves.

—RD

Through the Glass Ceiling to the Stars

The Story of the First American Woman to Command a Space Mission

Eileen M. Collins, with

Jonathan H. Ward

Arcade, 2021. \$27.99



Not only was Eileen Collins the first woman to command an American space mission, she was also one of the US Air Force’s first female pilots and the first woman to pilot a space shuttle. An unremarkable student in high school who was raised by a single mother, Collins became fascinated with aviation at an early age. She was accepted into the air force’s ROTC program and then NASA’s astronaut program, flying a total of four space shuttle missions—two as pilot and two as commander—from 1995 to 2005. With coauthor Jonathan Ward, a writer and space history enthusiast, Collins recounts her inspiring story as a woman in a traditionally male field and as an aviation pioneer during NASA’s space shuttle era.

—CC **PT**