NEW BOOKS & MEDIA

Universe Sandbox

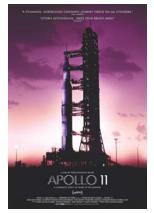
Giant Army, 2018 (Update 22.1). \$24.99

If you have ever wanted to build your own universe from scratch, or see what would happen to ours if you flicked Mars out of its orbit, Universe Sandbox is the video game for you. This space simulator allows users



to experiment with adding or removing planetary bodies from both our solar system and known exoplanet systems like TRAPPIST-1. You can replace our sun with a red dwarf, add asteroids or new planets, and—if you're really looking to cause trouble—throw in a black hole. You can also build your own system from scratch. Because there are so many options, the controls and menus are not always intuitive; players will benefit from spending time with the game's tutorials. An early-access version is currently on sale at Steam, and publisher Giant Army reports that more updates and features are coming. Available for Windows, Mac, and Linux operating systems.

—MB



Apollo 11 Todd Douglas Miller CNN Films/Statement Pictures, 2019

In this new documentary, director Todd Douglas Miller uses a massive cache of film and audio recordings from the US National Archives to tell the story of the 1969 Apollo 11 launch. The film has no narration but instead relies on the recordings from NASA's Mission Control to tell the viewer what is happening on-screen. Since the film footage itself is silent, matching that footage with the appropriate Mission Control recordings is an impressive technical feat. *Apollo 11* also uses background music to convey awe, tension, and beauty. In one particularly touching moment, as the crew is heading back Earthward, Buzz

Aldrin says, "Let's get some music." "Mother Country" by John Stewart starts playing softly on a portable tape recorder, and viewers watch the recorder flip end-over-end inside the zero-gravity cabin. The film is a worthy monument to the people who made the Moon landing happen. *Apollo 11* opened in IMAX and cinemas in March, a 40-minute IMAX version will be released on 17 May, and CNN will air the film this summer. For a full review, see physicstoday.org/Apollo11. —PG

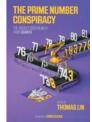
Alice and Bob Meet the Wall of Fire

The Biggest Ideas in Science from Quanta

The Prime Number Conspiracy

The Biggest Ideas in Math from Quanta

Thomas Lin, ed. MIT Press, 2018. \$19.95 apiece (paper)





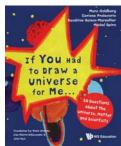
These two companion volumes represent some of the best articles published in *Quanta Magazine* since its inception as an online publication seven years ago. The set, edited by *Quanta* founder and editor-in-chief Thomas Lin, presents the latest developments in theoretical physics, computer science, life sciences, and mathematics in a manner designed to be accessible to the general reader. Each book is divided into sections aimed at grabbing readers' attention by addressing some big questions of science: What is time? What is life? Why doesn't our universe make sense?

—CC

If You Had to Draw a Universe for Me ...

50 Questions About the Universe, Matter and Scientists

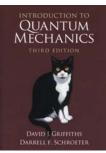
Marc Goldberg, Corinne Pralavorio, Sandrine Saison-Marsollier, and Michel Spiro WS Education, 2019. \$14.90 (paper)



The result of a competition organized by CERN in 2014, this book features the colorful artistic renderings of French and Swiss school-children who were tasked with asking and illustrating fundamental physics questions, such as What's inside a black hole? Each question and drawing are accompanied by a scientific explanation and a literary quotation. CERN has a reputation for sponsoring programs to foster dialog between artists and scientists, and the book's four authors—a playwright, a CERN communications officer, an educational consultant, and a physicist—reflect that goal.

Introduction to

Quantum Mechanics David J. Griffiths and Darrell F. Schroeter Cambridge U. Press, 2018 (3rd ed.). \$74.99



For the third edition of his popular *Introduction to Quantum Mechanics*, well-known text-book author David Griffiths brings aboard a new coauthor, condensed-matter theorist Darrell Schroeter. Changes include a new chapter on symmetries and conservation laws, more material on solid-state physics, and many new problems and examples. Students and instructors will appreciate the book's easy-to-follow layout and clearly labeled graphs and diagrams.