

NEW BOOKS & MEDIA

The TVs of Tomorrow

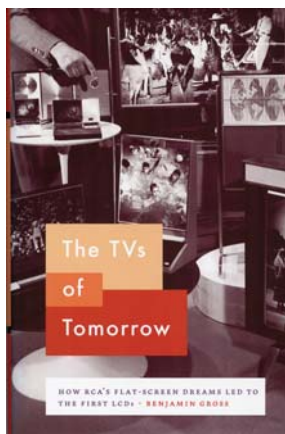
How RCA's Flat-Screen Dreams Led to the First LCDs

Benjamin Gross

U. Chicago Press, 2018. \$40.00

In 1968 scientists and engineers at RCA announced that they had created an electronic display that relied on liquid-crystal technology. Today LCDs are used in everything from bedside clocks to computer monitors and home televisions, but RCA shared in little of the financial glory from its invention. In *The TVs of Tomorrow*, historian of science Benjamin Gross uses laboratory notebooks and in-depth interviews with scientists at RCA to reconstruct the scientific path to the LCD. Gross also has a sharp eye for business history and explores the company's difficulties commercializing its new technology. The book will appeal to anyone interested in the intersection of scientific innovation and industrial research.

—MB



Talk Nerdy

Cara Santa Maria, 2017–present

Decorated science journalist Cara Santa Maria just hit the 100-episode milestone of her weekly podcast *Talk Nerdy*. The show bills itself as “conversations with interesting people about interesting topics,” and each episode features an in-depth interview with a scientist or science communicator. Recent guests have included geologist Lucy Jones, systems biologist Stacey Finley, and filmmaker and conservationist Byron Pace.

Santa Maria, herself a PhD candidate, brings her own knowledge to the table but is skilled at letting her guests shine. Episodes are roughly an

hour long and are available for download on iTunes and other podcast platforms.

—MB

The Science of Marvel

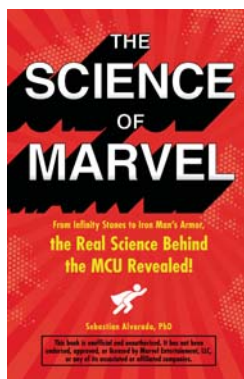
From Infinity Stones to Iron Man's Armor, the Real Science Behind the MCU Revealed!

Sebastian Alvarado

Adams Media, 2019. \$16.99 (paper)

Scientists haven't figured out how to give us mere mortals Captain America's strength or Spider-Man's spidey sense, but there's still plenty of physics, neuroscience, and biology to think about in the Marvel Cinematic Universe. In this short and engaging book, Sebastian Alvarado, a neuroscientist at Queens College, City University of New York, uses characters and plot points from the Marvel movies to spark discussions on scientific phenomena. Alien assassin Nebula inspires a section on cybernetic prosthetics, for example, and the showdown between *Black Panther's* T'Challa and Killmonger gives Alvarado an opportunity to talk about nature versus nurture. Alvarado's love for the films is obvious on every page, but the book is not for those hoping for a lot of superheroes and very little science—at different points, Alvarado discusses de Broglie waves, the Schrödinger equation, flame emission spectroscopy, and protein tensile strength.

—MB **PT**



Assistant Professor in Theoretical Quantum Condensed Matter Physics

The Department of Physics and Astronomy at the University of Pennsylvania seeks applications from outstanding candidates for an appointment as Assistant Professor in theoretical quantum condensed matter physics. The successful candidate will develop an innovative research program on quantum phenomena in condensed matter that attracts the participation of students and creates collaborative links with other Penn scientists and engineers. The candidate should have a Ph.D. in physics at the time of appointment, and will be expected to teach, to attract external research funding and to contribute actively to the Laboratory for Research on the Structure of Matter. Applicants must apply online at <http://apply.interfolio.com/66353>.

Required application materials include: curriculum vitae with a list of publications, a research statement, a teaching statement, and three letters of recommendation. Review of applications will begin no later than November 1, 2019 and will continue until the position is filled. It is anticipated that the position will start July 1, 2020. The Department of Physics and Astronomy is strongly committed to Penn's Action Plan for Faculty Diversity and Excellence and to creating a more diverse faculty (for more information see: <http://www.upenn.edu/almanac/volumes/v58/n02/diversityplan.html>). The University of Pennsylvania is an equal opportunity employer. Minorities/Women/Individuals with disabilities/Protected Veterans are encouraged to apply.