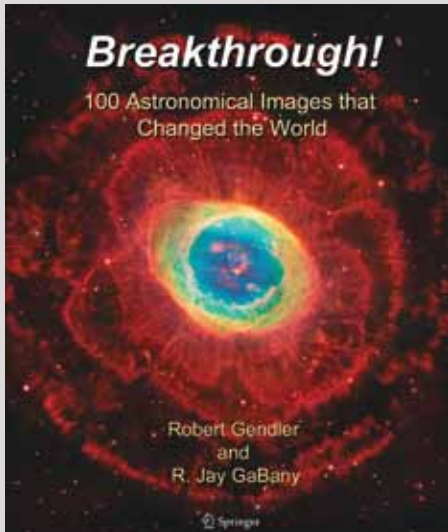




Evolution of Astroimaging

Breakthrough! 100 Astronomical Images That Changed the World



Robert Gendler and R. Jay GaBany
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\$34.99, hardcover; \$24.99 eBook.

AS AN ASTROPHOTOGRAPHER who grew up in the days of hypered Kodak 2415 technical pan film and hand guiding, lived through the development of charged-couple devices, and revels in today's fantastic images from advanced astrophotographers and satellites, I thoroughly enjoyed *Breakthrough! 100 Astronomical Images That Changed the World*. Like Galileo's first revolutionary description of the view through a telescope, the coupling of a camera to a telescope led to a dramatic revolution of understanding. The common theme in both events is that each has changed our perception of the universe in some way.

Breakthrough! is a marvelous history of imaging. Gendler and GaBany, who are well-known advanced astroimagers, start with the earliest forays into daguerreotypes and then detail the development of astrophotography over the past 175 years, all the way up to today's advanced imaging and processing. The authors accomplish this

through a series of 100 carefully selected images, starting with the first daguerreotype of the Moon taken in 1840 and ending with today's deepest images of the universe taken by the Hubble Space Telescope. The images are accompanied by well-written descriptions highlighting the importance and significance of each photograph. Along the way, the history of imaging naturally unfolds, as does an evolving interpretation of the universe made possible with each new image.

The authors describe the images not only in terms of the evocative beauty presented, but also to explain either a new, deeper insight into science revealed by the image or an advance in the techniques of imaging and processing. I especially enjoyed the presentation of photographs from the 19th and early 20th century: how they were obtained and how they changed humanity's perception of its place in the universe. Each image has changed our conception of the universe in some way over the last 175 years. Readers will recognize many of the newer images that were unveiled with some fanfare during the last 30 years as newsworthy items that changed our appreciation of the universe. It's wonderful to have these spectacular images collected in one volume.

In keeping with the old adage that one picture is worth a thousand words, this marvelous collection of images, supported with excellent descriptions, offers a concise history of the art and science of astronomy, recording the greatest milestones in the history of modern astronomy. I thoroughly recommend this book, particularly as it was written by a pair of very accomplished astroimagers, both of whom have advanced the field not only with their own photography, but with innovative processing techniques that have enhanced even images from the Hubble Space Telescope and other professional observatories. This is a volume worth keeping as a reference source for many years to come. ♦

Amateur astronomer and cardiologist Mario Motta observes with his 32-inch f/6 relay telescope from Gloucester, MA. He is a board member of the International Dark-Sky Association (IDA) and has been active in light pollution control issues since 1990 when he co-founded the New England Light Pollution Advisory Group (NELPAG).