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SCIENTISTS' NIGHTSTAND

Scientists' Nightstand: Chris Impey

[Greg Ross](#)

Chris Impey is a University Distinguished Professor of astronomy at the University of Arizona, where he runs the nation's largest undergraduate-major program in that discipline. His popular book on astrobiology, *The Living Cosmos*, was published by Random House in 2007.

Could you tell us a bit about yourself?

I am an astronomer and educator who has worked at the University of Arizona for 20 years. Running the academic program keeps me busy day to day; we have 30 faculty, several hundred of our own students and several thousand taking our introductory astronomy courses. I'm from Scotland, but long ago left the damp climate and cramped circumstance of my homeland for the clear skies and wide-open spaces of the American West. My research focuses on active galaxies, doing surveys to see how supermassive black holes have grown over cosmic time.

I have side projects to try and understand dark matter and dark energy, the twin imponderables at the heart of the modern picture of the universe. I love observing; the several hundred dawns I've seen from high mountaintops include some of the best moments of my life.

Teaching is essential for me. The restless energy of students forces you to re-engage your own knowledge, even in the context of a course for non-science

majors. I've written two astronomy textbooks and many research papers, but the constraints of those formats sometimes chafe, so I have moved steadily in the direction of popular writing, and I put my wilder musings into several blogs. I believe every scientist who can write for a popular audience should do so; we face a crisis of science literacy in this country, and a large part of the population has disengaged from a scientific way of thinking. Most of the people I meet dislike or merely tolerate their jobs. I never forget how lucky I am to be paid to think about how the universe works.

What books are you currently reading (or have you just finished reading) for your work or for pleasure? Why did you choose them, and what do you think of them?

I just read *The Happiness Myth* by Jennifer Michael Hecht (HarperSanFrancisco, 2007). She is a social historian and poet who just visited to give lectures on what we might expect when we encounter life elsewhere in the universe. She is analytic but has a wicked sense of humor, neatly jumping out of the box to view human strivings and failings. I recently read *The Ancestor's Tale* by Richard Dawkins (Houghton Mifflin, 2004), which is a magisterial book on evolution. For fun, Jane Smiley's *Ten Days in the Hills* (Knopf, 2007), and I dip into poems from *The Essential Rumi* (Harper, 1995).

When and where do you usually read (specific location, time of day, etc.)?

My mind gets numbed by all the reports and turgid prose I have to read as an administrator, so I find it hard to fit more leisurely reading into the day. Some evenings, I get a nice block of time to read; no music, just the tick of a clock for company. Mornings on the weekend are best.

Who are your favorite writers (fiction, nonfiction or poetry)? Why?

I am attracted to ideas, so I tend to like the "clever dick" fiction writers like Martin Amis, Don DeLillo, John Updike and Will Self. There are a few who are so automatic that I will read everything they write: Toni Morrison, Jane Smiley, Ian

McEwan and J.M. Coetzee. In nonfiction, Jon Krakauer is a masterful storyteller who reaches out of the page to pull you into the intense worlds he recreates. For pure fun, I enjoy the crazed characters and humorous set pieces in Carl Hiaasen's Florida-based novels, and for enjoyable crime I turn to Walter Mosley, Ruth Rendell and my homeboy Ian Rankin. In the bleak-but-beautiful category, anything by Annie Proulx or Cormac McCarthy. Poetry scratches a place other writing can't reach. At times I turn to Seamus Heaney, Billy Collins, Anne Sexton, Emily Dickinson and E. E. Cummings.

What are the three best books you've ever read? Explain.

An almost impossible question. The books and writers that nourish you change, but all remain important because you draw on them in ways you barely recognize.

Gabriel Garcia Marquez's *One Hundred Years of Solitude* (Harper & Row, 1970) blew me away when I read it as a young man because I had never been drawn so completely into such a richly imagined world. Thomas Pynchon's *Gravity's Rainbow* (Viking Press, 1973) managed a similar trick, and I loved its playful use of math and science. More recently, I would say Ian McEwan's *Saturday* (Doubleday, 2005), because it seemed to me almost pitch-perfect and the work of a fine writer at the very top of his game.

What book has influenced you most? Explain how.

Another hard call, like picking which of your kids has meant the most to you. But I would drop back to my childhood and *The Phantom Tollbooth*, by Norton Juster (Random House, 1961), with wonderfully evocative illustrations by Jules Feiffer. It is the adventure of a boy and his dog in a fanciful world where numbers and letters are just as much characters as the people. A perfect whimsy to unlock and fuel the imagination of any young person. A close second would be *Snow Crash*, by Neal Stephenson (Bantam Books, 1992), which is just as visionary

today as when it first came out, or Milan Kundera's *The Unbearable Lightness of Being* (Faber and Faber, 1984).

Name three books you want to read but haven't gotten to yet.

I always have a few small piles of books staring at me balefully from my desk or table. Currently near the top are *The World Is Flat*, by Thomas Friedman (Farrar, Straus and Giroux, 2005), *God: The Failed Hypothesis*, by Victor Stenger (Prometheus Books, 2007), and a fat one by Don DeLillo, *Underworld* (Scribner, 1997). Too many books, too little time.

What book recommendations do you have for young readers?

For young readers, *The Phantom Tollbooth*, mentioned above, and *A Wrinkle in Time*, by Madeleine L'Engle (Ariel Books, 1962). Many kids devoured the Harry Potter series, but far fewer have experienced the extraordinary power of Philip Pullman's *His Dark Materials* trilogy (*The Golden Compass*, 1995, *The Subtle Knife*, 1997, *The Amber Spyglass*, 2000). They are richly imagined and filled with wonderful characters. They are equally important books for adults to read.

What science book recommendations do you have for nonscientists?

Nonscientists are richly served with popular books; the shame is that not enough of them find their audience due to the brutal calculus of publishing, where blockbusters starve the middle list and rants are preferred to careful and engaging treatments. Going back a ways, Primo Levi's *The Periodic Table* (Schocken Books, 1984) is a beautifully written memoir of people he knew during the Second World War and their element analogs. *Cosmicomics*, the book of short stories by Italo Calvino (Harcourt, Brace & World, 1968), is brilliant, and I've never read anything else like it. Stephen Jay Gould's *A Wonderful Life* (W. W. Norton, 1989) is an eloquent paean to evolution and a stirring explanation of the strange evolutionary path that brought us to this point.

Simon Singh's *Fermat's Last Theorem* (Fourth Estate, 1998) takes highly abstract math and turns it into a gripping detective story. Brian Greene's *The Elegant Universe* (W. W. Norton, 1999) justly became a bestseller by laying out the extraordinary nature of matter and space in the light of modern fundamental theories. There are many more, but then you would be faced with the same baleful piles that I have to deal with.

Name one book in your discipline that you would recommend for scientists outside your field. Explain your choice.

This is easy. Tim Ferris' *Coming of Age in the Milky Way* (Morrow, 1988). It's currently overdue for an update and second edition, but no matter. In my mind it is the very best single book to give the full sweep of astronomy to a nonscientist. It took him 10 years and was a labor of love, and the quality of the writing is outstanding. Readers will get a full sense of the intellectual journey that has taken us from Greek speculations about the size and location of the Earth to an awareness of humans as the detritus of stellar evolution on a rocky cinder around one among trillions of stars in a vast, expanding universe.



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