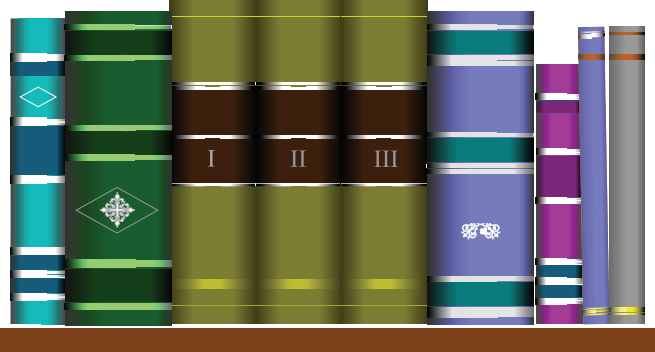


BOOKS

WHAT ARE THEY READING?



The Daily Astorian invites people to submit titles of books they are reading and share a few thoughts about the work. This week, Don Haskell, a retired attorney and former Clatsop County commissioner, shares some of his favorites about physics. To submit, send to news@dailyastorian.com

One of my favorite books discusses the most famous mathematical equation in all of physics. Although not an easy read like a Tom Clancy spy novel, Brian Cox and Jeff Forshaw’s “Why Does $e = mc^2$?” explains Albert Einstein’s discovery why there’s enough pent-up energy in the period at the end of this sentence to blow up Astoria.

And, of course, Einstein’s discovery led to the atomic bomb.

My interest in physics began when I was laid up with a broken ankle

15 years ago. My library now has most laymen’s physics books published since then. And the more I read about physics, the more wondrous becomes the universe and the human intellect trying to figure it all out.

In “The Fabric of the Cosmos,” Brian Greene introduces a universe so vast it’s almost impossible to picture how large it is. Greene describes it as one so vast that if the earth were the size of the entire cosmos, the observable universe we can see with our largest telescopes would be smaller than a grain of sand!

One faraway star is so large that if you were flying in an airplane at 600 miles per hour, it would take you 30,000 years to fly around its equator!

At the other end of the scale, Timothy Smith describes in “Hidden Worlds” the smallest things physicists know anything about — quarks, which can’t be divided further and are part of every atom. And a quark is so small that if it were the size of the average person, the tiny atom would be much larger than the earth!

What is human consciousness?

Surprisingly however, no physicist has yet been able to figure out just what human consciousness really is; although a chemist, Francois Tibika, makes an interesting attempt at it in “Molecular Consciousness.”

Nor has anyone figured out what biological life itself actually is, although in “Biocen-

trism” Dr. Robert Lanza tries to figure it out from the medical viewpoint.

Nor has any physicist been able yet to figure out the invisible stuff that makes up over 95% of the observable universe. Physicists everywhere call this mysterious stuff dark energy and dark matter. Richard Panek describes this strange state of affairs in a fascinating way in “The 4% Universe.”

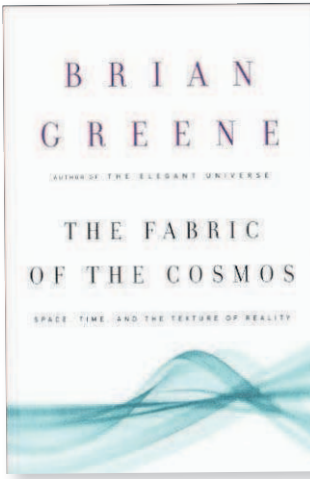
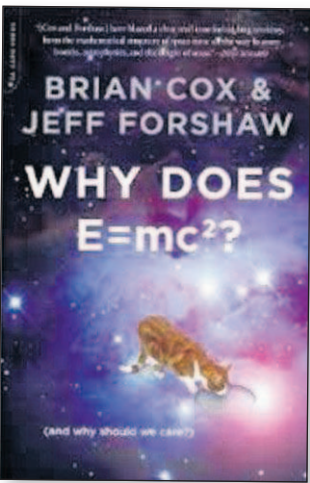
In “Time Reborn” Lee Smolin explains the amazing conclusion of physicists everywhere that light is at the same time both a particle and a wave (that travels 186,000 miles per second — about 700 million mph). Smolin discusses Einstein’s universally accepted conclusion that “time” doesn’t exist for anything going that fast.

Past, present, future are one

The mind-boggling conclusion of physicists around the world is that the past, present and future are actually one — i.e., everything that happens, that has already happened, or will ever happen, is all part of one continuum — a concept extremely difficult for most human minds to understand, let alone accept. As physicist Michael Lockwood argues in “The Labyrinth of Time,” what we all perceive as the “passage of time” is an illusion. It’s simply part of the human condition — what our minds have been conditioned to think is reality in order to survive.

To me the most fascinating physics books describe the smallest things in the universe. Physicists call the field quantum physics, which has different natural laws than classical physics, which describes the largest.

Classical physics was proposed by Isaac Newton centuries ago and is what my generation learned in high school physics classes in the 1940s. The new quantum physics has given us television, the Internet, the computer,



the iPhone, the iPad, the laser, medical imaging, and many other marvelous things that didn’t exist when I was growing up.

Yet no physicist in the world today really understands what’s happening at the smallest level. Robert Feynman, the famous Princeton University physicist is known for his statement that, “if you think you understand what happens at the quantum level, you obviously don’t understand it.”

‘Entangled’

As one example, many thousands of experiments around the world prove that at the quantum (smallest) level, two particles can become “entangled” such that information about them is passed instantaneously between them no matter how far apart they are, even thousands of miles apart — or even at opposite ends of the universe. Yet the result that information somehow goes faster

than the speed of light is impossible according to Einstein’s universally accepted theories of relativity. This conflict is described in technical detail in

a difficult read by theoretical physicists Tony Hey and Patrick Walters in “The New Quantum Universe.”

And another mystery of the quantum world is even weirder.

In “Quantum Enigma,” physicists Bruce Rosenblum and Fred Kuttner explain that at nature’s smallest level nothing happens unless there is some form of interaction by conscious beings to decide what will happen. As unbelievable and nonsensical as that sounds, that apparent rule of nature has been confirmed by thousands of experiments by physicists everywhere. To most physicists that means the human condition creates its own reality — another

concept very difficult to understand, let alone to accept as a natural law.



Joshua Bessex/The Daily Astorian
Don Haskell is fascinated by the mysteries of physics.

Mysterious state of affairs

The mysterious state of affairs with quantum physics has led many physicists to theorize, as Paul Davies explains in “Other Worlds,” that there must be an infinite number of universes with an infinite number of copies of everything, including us. But so far nobody’s been able to detect other universes, so at least for now the concept of parallel worlds is a creature only of theoretical physicists.

For many years physicists have tried to resolve the mystery why the

smallest things in quantum physics and the largest things in Newtonian physics appear to follow entirely different natural laws. As Rosenblum and Kuttner put it, “classical physics explains the world quite well; it’s just the details it can’t handle. Quantum physics handles the details perfectly, it’s just the world it can’t explain.”

Personally, I think it’s no surprise scientists all over the world are nowhere near close to answering the mystery. Books about physics describe a universe simply too wondrous for the human intellect to ever know everything.

Lights: It takes about 20 to 30 hours to sequence the lights to each song

Continued from Page 1C

It takes Mike about 20 to 30 hours to sequence the lights to each song. He began that process months ago. The week before Thanksgiving, the Adelmanns began putting up the decorations, finishing by the start of December. Because they were designing for a new and slightly less familiar location, they used only a portion of the decorations they have stockpiled.

“There wasn’t enough time to get a full display,” Mike said.

A decorated Victorian

The Adelmanns said they enjoyed decorating the Victorian home, a stark juxtaposition to their former stucco, flat-roofed home in New Mexico. Already they have plans to expand on the project next year and create an even greater, more complex display.

When searching for a house, the ability to be decorated was one of the couple’s criteria, along with a nearby hospital for Teale, who works as a nurse. The couple also wanted a view of water and that the house be somewhat different — not “the cookie-cutter home” they were used to, Teale said.

The historic house, perched by the Skipanon River and only about 12 miles from Providence Seaside Hospital, fit the bill.

“This checked all those boxes,” she said.

When they moved in, they



Lights brighten the holiday season.

constructed a garage in the back with a new power line specifically to run the lights and also to store all the decorations, lights and thousands of feet of homemade extension cords.

A few months ago, the house was decked in a different display — rife with hues of orange and black, singing pumpkins and skeletal figures — to celebrate Halloween.

The Adelmanns got permission from the Skipanon Marina for people to park there and walk to the house to trick-or-treat and watch the show.

For Christmas, however, spectators are encouraged to relax in their cars. A sign posted in front of the house tells spectators which frequency to tune into. The music and speaking portions play on a loop.

‘A continuous flow of cars’

There have been few traffic backups so far — sometimes three or four motorists are waiting their turn to get the prime viewing location. Usually, “there is a continuous flow of cars,” Mike said.

As of now, the couple only decorate for Halloween and Christmas and there are no

plans to put up light displays for other holidays, although Teale has envisioned some fun things that could be done for Valentine’s Day.

For the Adelmanns, the most fulfilling part of the project is seeing the joy and smiles from observers. Through an informational website on the house, the couple has received emails expressing apprecia-

tion for the light show. Sometimes spectators will wave or honk their horns, or kids will get out and dance to the music. The couple likes “to see how happy the people are, that they came by and enjoyed it,” Teale said.

“We make someone’s day. We make them smile,” she added.

They also take personal pleasure going outside to watch the show themselves every few nights.

“It’s pretty emotional to see the lights, especially when ‘Amazing Grace’ comes on,” Teale said. “It’s just beautiful to see the whole house and how it’s lit up.”

Their neighbors, here and at past residences, have not complained. The couple tries to be respectful by turning off the display by a decent hour, Teale said. Additionally, the traffic has not been overwhelming.

“We’ve never heard anything but positive feedback from neighbors,” Mike said.

In fact, their current neighbors, George and Doris Warren, have joined in the fun. In lieu of decorating the exterior of their house, the Warrens put up a sign, lined with lights, that reads “Ditto” and has an arrow pointing to the Adelmanns’ house.

“At first, we didn’t know how they would respond, because it might be too much for some people, but they just love it,” Mike said.



Coast River
BUSINESS JOURNAL

Chronicling the Joy of Business in the Columbia-Pacific Region

FREE SUBSCRIBED THE FIRST THURSDAY OF EACH MONTH

January 2015

Inside: Industry spotlight: **Shellfish farm copes with challenges**
Taylor remains optimistic despite changing ocean conditions

NEWS Pacific County makes a splash with projects page 10

NEWS Season Muttler and Off-road with kids regulations page 21

BOAT OF THE MONTH The boat of the month page 24



Now inserted into
The Daily Astorian and
Chinook Observer

For more information call 503-325-3211



Coast River
BUSINESS JOURNAL

crbizjournal.com