

## ASTRONOMY

# Scientists discover distant galaxy

A team of international researchers probed the early universe with NASA's Hubble Space Telescope

By **Bethany Augliere**

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**SANTA CRUZ** » Scientists have shattered cosmic records and found the most distant object in the universe: an infant galaxy called GN-z11 that existed 13.4 billion years ago.

An international team of scientists, including astronomer

Garth Illingworth from UC Santa Cruz, detected this galaxy from images taken with NASA's Hubble Space Telescope. The discovery is a snapshot into the early universe and provides astronomers with clues about the formation of galaxies.

The study will be published Tuesday in the *Astrophysical Journal* and is available online now.

"It's a remarkable finding and discovery," said Piero Madau, an astrophysicist at UCSC, who was not involved in the study. "Those people have found a galaxy basically shining in the 'baby universe.'"

The young galaxy existed when the universe was around 400 million years old after the Big Bang, just 3 percent of its current age.

"We are seeing this galaxy close to when the first galaxies formed," he said.

GALAXY » PAGE 3



Galaxy GN-z11, shown in the inset, is seen as it was 13.4 billion years in the past, just 400 million years after the big bang, when the universe was 3 percent of its current age.

NASA, ESA — CONTRIBUTED

## SANTA CRUZ HARBOR

# JETTY STAND



SHMUEL THALER — SANTA CRUZ SENTINEL

Two visitors to the Santa Cruz Jetty take cellphone photos next to the Walton Lighthouse at the mouth of the Santa Cruz Small Craft Harbor on Wednesday. While a light has marked the entrance to the harbor since 1964, it wasn't until June 2002 that the Walton Lighthouse was dedicated. The lighthouse, designed by Mark Mesiti-Miller and built by Devcon Construction, stands just over 41 feet tall, weighs 350,000 pounds and is built to withstand a quarter million pounds of wave energy. The structure is named after Derek Walton, who served in the merchant marines and was lost at sea in WWII. Money was raised to build the lighthouse under the leadership of Bill Simpkins and Jim Thoits and was made possible through a major donation from Derek Walton's brother Charles Walton.

## MOVIES

# 'Finding Dory' takes her to Monterey

Pixar production uses bay, aquarium as backdrop

By **Jeannie Evers**  
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**MONTEREY** » Dory, the forgetful and delightful blue fish in Pixar's "Finding Nemo," had a saying: "Just keep swimming." It was her way of telling her underwater friends — and us — to keep moving forward no matter what life throws our way.

But let's ignore meaning and look at the literal, just so we can advise Dory to alter her catchphrase a bit: "Just keep swimming ... to Monterey."

Because that's where she's headed in the "Finding Nemo" sequel, "Finding Dory," hitting theaters this summer. The animated blue tang, voiced by Ellen DeGeneres, is off on a new adventure in search of her parents.

News that her journey would lead to Monterey has apparently been out there for about a year, but it's circulating more prominently now thanks to a new trailer released this week and the pending arrival of bloggers Monday for a sneak peek of the movie, a meet-and-



DISNEY/PIXAR

"Finding Dory," the sequel to "Finding Nemo," will be released June 17.

greet with the director and a VIP tour of the Monterey Bay Aquarium. The bloggers — invited by Disney, which owns Pixar Animation Studios — will be sharing their experiences on social media with the hashtag

#FindingDoryEvent.

One of those bloggers is Gayle Turner, co-founder of Life Is An Adventure — The Disney Gals. On Wednesday, she wrote that the animators and production team put in a lot of research hours at the aquarium to learn how it works, and that it will be depicted on-screen as the Monterey Marine Life Institute.

A Monterey Bay Aquarium spokesman said he couldn't comment. "At this point, it's all Disney/Pixar's story to tell," wrote Communications Director Ken Peterson in an email.

MONTEREY » PAGE 3

## ECONOMY

# January's jobless rate at 9 percent

Professional, business jobs in Santa Cruz County up 600 vs. a year ago

By **Jondi Gumz**

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**SANTA CRUZ** » The unemployment rate in Santa Cruz County was 9 percent in January, up from 8.3 percent in December but down from 10.2 percent a year ago, the state Employment Development Department reported Friday. February numbers will be posted March 18.

As of Jan. 12, the count showed 101,000 jobs in the county, a robust figure for this time of year.

That's 1,600 fewer from December due to seasonal losses in ag, retail, manufacturing and construction, but 1,500 jobs ahead of a year ago.

The count includes part-time as well as full-time jobs.

Most sectors show gains from a year ago.

Professional and business services were a bright spot, up 300 from December and up 600 from a year ago, according to state analyst Jorge Villalobos.

In contrast, professional and business services jobs declined by 1,200 during the month in Santa Clara County, home to Silicon Valley.

The state updated Santa Cruz County's numbers to show 102,600 jobs in December, not 98,900, as had been announced.

"As detailed tax records come in, we were able to revise that," Villalobos said.

Four sectors saw revisions upward of 300 or more jobs: Government, which is the largest employer in the county, leisure and hospitality, private education and health services, and professional and business services.

Smaller upward revisions came in construction, trade, farm and other services. The information sector stayed the same at 800 jobs.

County government is seeking to fill 18 positions in health services, with ongoing recruitment for a medical director, psychiatric medical director, psychiatrist, physicians assistant/nurse practitioner, clinical psychologist and public health nurses.

March 11 is the last day to apply to be health educator. Recruitment for assistant director of the Health Services Agency closes March 25.

Other county government openings include: Building permit technician, closing March 11 and starting at \$4,432 a month; pre-treatment program specialist in the sanitation division, closing March 11, and starting at \$5,096 a month; and equal employment opportunity officer, closing March 11 and starting at \$83,346 annually.

The county is advertising for summer lifeguards with pay starting at \$14.41 per hour, and aquatics specialists, starting at \$20.28 an hour. Applications are due April 22.

On SantaCruzJobs.com, PPR Travel Nursing is recruiting registered nurses for jobs in Santa Cruz, with openings for the neonatal intensive care unit and the telemetry unit where patients are under continuous monitoring. OneStaff Medical is recruiting registered nurses for jobs in Watsonville, including the neonatal intensive care unit and labor and delivery.

JOBS » PAGE 3

## ELECTION 2016

# Local ballot arguments due March 17

Live Oak, Libraries measures on June primary

By **Jessica A. York**  
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**SANTA CRUZ** » The Santa Cruz County Clerk/Elections Department has announced the deadline to make arguments for and against two local measures set to go on the June primary ballots.

Those wishing to file formal arguments need to submit a maximum of 300-word statements by 5 p.m., March 17. Only one argument for and one against each measure will be printed in the county's Voter's Information Guide mailed to all registered voters in early May.

To date, the two measures include a Santa Cruz County Library Bond and a Live Oak

School Parcel Tax. The deadline for calling for a measure to be placed on June's ballot is March 11. A Cabrillo College bond measure is expected to be submitted for the same election.

A hard copy of arguments need to be filed with the Santa Cruz County Clerk's Office, 701 Ocean St., Room 210, Santa Cruz, 95060, along with a signed "Signature Statement"

form, available from the elections official or online at votescount.com, with original signatures. The arguments also must be emailed in an electronic format that can be edited to info@votescount.com.

Full text of the ballot measures is available online at votescount.com. Call the Santa Cruz County Clerk/Elections Department at 831-454-2060 or email info@votescount.com.