

Roscoe Jarboe of New Plymouth Idaho gets bucked off a bull during the Tuff Hedeman Bull Riding Tour

The longest eight seconds

A bull gets roped after bucking off its rider

Riding a bull in Texas

El Paso, United States

Anyone who doubts that some seconds last a lot longer than others should try riding a bull at the Tuff Hedeman Bull Riding Tour in El Paso.

As in all great rodeo classics, the rider has to hang on with just one hand as the bull bucks and kicks.

Some 25 contestants tried their luck and skill Saturday night in El Paso: the challenge was to ride a bull for at least eight seconds without getting thrown and without touching it with their free hand.

The Tuff Hedeman Bull Riding Tour is named after a four time world bull riding champion, who today is retired.

The competition carries a \$30,000 prize and cowboys come from far and wide to participate.

For instance, Ben Jones, who injured his face during the event, is originally from Australia.

Inseparable from the American West Juan Alonzo, a Texan, can also testify to the dangers of rodeo. He served in the US army for five years, and while on a tour of duty in Iraq, he trained on a wooden barrel.

The rider grips a leather handle attached to a flat braided rope cinched around the bull. The bulls can weigh a ton.

Inseparable from the American West and the myth of the cowboy, but in reality owing much to Spanish and Mexican vaqueros, rodeo celebrates balance and resistance to pain.

Brady Portenier of Caldwell Indiana competes in the El Paso County Colosseum during the Tuff Hedeman Bull Riding Tour

'Killer' cells raise hope of universal flu vaccine

Paris, France

Scientists said Monday they had discovered immune cells that can fight all known flu viruses in what was hailed as an "extraordinary breakthrough" that could lead to a universal, one-shot vaccine against the killer disease.

Influenza epidemics, largely seasonal, kill hundreds of thousands of people each year, according to the World Health Organization.

Due to its mutating strains, vaccine formulas must be regularly updated and only offer limited protection currently.

Researchers in Australia said that "killer T cells" -- found in over half the world's population -- had shown in testing to be effective in fighting all common flu varieties.

This means the cells could potentially be used to develop an all-encompassing flu shot that did not need to be changed annually, and even be effective in people who don't naturally possess them.

"Influenza viruses continuously mutate to evade recognition by our immune system,

and they are vastly diverse, making it nearly impossible to predict and vaccinate against the strain that will cause the next influenza pandemic," said Marios Koutsakos, a researcher at the University of Melbourne's Doherty Institute.

T cells are a type of white blood cell that roams the body scanning

for abnormalities and infections. They are essential for human immunity against a host of invading bacteria and viruses.

So-called "killer" T cells are unique in that they can directly target and kill other infected cells.

Koutsakos and his colleagues used mass spectrometry -- a scanning technique that helps separate molecules based on their mass -- to identify parts of the virus that are shared across all flu strains, and realised that killer T cells could effectively fight variations of influenza A, B and C.

Flu is especially dangerous for elderly people, children and those with compromised immune systems, as well as certain ethnic groups who never developed immune responses to the disease.

The team behind the research has patented their discovery, and researchers said they hoped it would enable them to develop a universal influenza vaccine "to reduce the impact of pandemic and seasonal influenza around the world".



Universe just got bigger

New Universe map unearths 300,000 more galaxies

Paris, France

A new map of the night sky published yesterday charts hundreds of thousands of previously unknown galaxies discovered using a telescope that can detect light sources optical instruments cannot see.

The international team behind the unprecedented space survey said their discovery literally shed new light on some of the Universe's deepest secrets, including the physics of black holes and how clusters of galaxies evolve.

"This is a new window on the universe," Cyril Tasse, an astronomer at the Paris Observatory who was involved in the project, said.

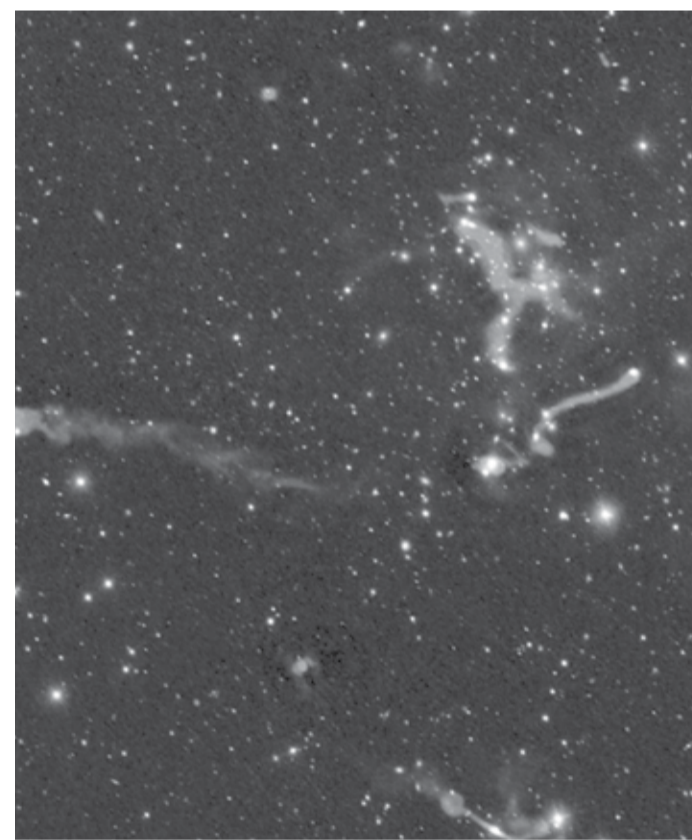
"When we saw the first images we were like: 'What is this?!' It didn't look anything at all like what we are used to seeing."

More than 200 astronomers from 18 countries were involved in the study, which used radio astronomy to look at a segment of sky over the northern hemisphere, and found 300,000 previously unseen light sources thought to be distant galaxies.

Radio astronomy allows scientists to detect radiation produced when massive celestial objects interact.

The team used the Low Frequency Array (LOFAR) telescope in the Netherlands to pick up traces -- or "jets" -- of ancient radiation produced when galaxies merge. These jets, previously undetected, can extend over millions of light years.

"With radio observations we can detect radiation from the tenuous medium that exists



This handout released by Paris Observatory - PSL shows an image taken with the Low-Frequency Array (LOFAR) radio telescope of diffuse emissions of material in a galaxy cluster

between galaxies," said Amanda Wilber, of the University of Hamburg.

"LOFAR allows us to detect many more of these sources and understand what is powering them."

The discovery of the new light sources may also help scientists better understand the behaviour of one of space's most enigmatic phenomena.

Black holes -- which have a gravitational pull so strong that no matter can escape them -- emit radiation when they engulf other high-mass objects

such as stars and gas clouds.

Tasse said the new observation technique would allow astronomers to compare black holes over time to see how they form and develop.

"If you look at an active black hole, the jets (of radiation) disappear after millions of years, and you won't see them at a higher frequency (of light)," he said.

"But at a lower frequency they continue to emit these jets for hundreds of millions of years, so we can see far older electrons."