# SCIENCE NEWS

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# VOLUME 178 No. 11, NOVEMBER 2010

#### IN THE NEWS

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• Artifacts push back date of toolmaking technique's debut.

#### 7 Humans.

- Typing mistakes reveal mind's error-catching pathways.
- Convicts struggle to weigh risks and benefits.

## 8 Body & Brain.

- Bitter air, better breathing.
- Before marathon, do the math.
- Pancreatic cell mutations develop into cancer slowly.
- Salmonella from pet frogs.
- •Anticancer protein versus HIV.

#### 10 Technology.

- Coffee grounds give robots a better pick-me-up.
- Gaming Wall Street at the speed of light.

## 11 Atom & Cosmos.

• Galactic gamma rays may be sign of dark matter.

## 12 Matter & Energy.

- Counting atoms to weigh the kilogram.
- Superheavies get new isotopes.

## Earth.

- Climate clues from beneath a Siberian lake.
- Sea Monster was crunchless.
- New old moon rocks.

#### 14 Genes & Cells.

- protein's levels in brain linked to depression.
- Human genome isn't perfect.

#### **SPECIAL ISSUE**

## 15 Clash of the Quantum Titans.

After 75 years of pondering a ghostlike cat and spooky action at a distance, physicists continue to debate what quantum mechanics says about the foundations of physical reality.

Tom Siegfried.

## **Everyday Entanglement.**

For decades it was just a hypothetical concept for illustrating quantum weirdness, but today entanglement is at the center of a hot experimental research field with the potential for many technology applications. *Laura Sanders*.

#### **DEPARTAMENTS**

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Albert Einstein explains his discomfort with quantum mechanics.

#### **COVER**

Schrödinger's cat, half alive and half dead, symbolizes the weirdness of quantum physics.

Michael Morgenstern.