Light with power of 100 bombs created by black holes: Scientists

TUCSON, Ariz. (UPI) — Light being sucked into black holes creates energy bursts that look like "blinking lights on a Christmas tree" and have the power of 100 hydrogen bombs the size of Jupiter, scientists say.

University of Arizona astronomers say as matter crosses a boundary of a black hole and is sucked inside, the gravitational attraction is so strong that no light can escape. In the process, huge amounts of matter being converted to energy give off the light.

The astronomers directed a worldwide effort in 1979 to learn about the light bursts found near a black hole and their findings were published recently in the Astrophysical Journal.

Researcher Roger Angel said: "Imagine the whole of Jupiter turned into an H-bomb, multiply its energy by 100 and set one bomb off every few hours," he said. "That gives you an idea of the energy of these 'lights.' "

Roger Moore, a former member of the team now at Caltech in Pasadena, Calif., said the bursts "looked something like the blinking lights on a Christmas tree."

John McGraw, another member of the Arizona team, said the new evidence indicates chunks of matter that orbit in a disc-shaped pattern around a black hole are "randomly being ripped off the inside of the disc and swallowed up."