



# NEWS

FOR IMMEDIATE RELEASE

## **THE BIGGEST, SMALLEST, FASTEST AND MOST EXPLOSIVE. NATIONAL GEOGRAPHIC TAKES SCIENCE TO EXTREMES IN A NEW THREE- PART PROGRAM: *KNOWN UNIVERSE***

**Premiering Sunday, February 15, 2009, at 8 PM ET/PT**  
***KNOWN UNIVERSE: THE FASTEST* at 8 PM ET/PT**  
***KNOWN UNIVERSE: THE BIGGEST AND THE SMALLEST* at 9 PM ET/PT**  
***KNOWN UNIVERSE: THE MOST EXPLOSIVE* at 10 PM ET/PT**

(WASHINGTON, D.C. — FEBRUARY 2, 2009) NATIONAL GEOGRAPHIC CHANNEL'S new three-part special **KNOWN UNIVERSE** combines the most current scientific information, cutting-edge computer graphics and everyday examples to shed light on some of the most mind-boggling aspects of our universe. Fascinating details are brought to life with stunning CGI, dramatic time-lapse sequences, slow-motion footage and easy-to-understand demonstrations.

From the size of our solar system to the most powerful explosions and the dynamic relationship among speed, time, distance and gravity, **KNOWN UNIVERSE** illuminates the really big questions with insights that everyone can understand. Just how big was the Big Bang? Is there life on other planets? What would traveling at "warp speed" really look like? What would happen if you were sucked into a black hole? Could wormholes make time travel a reality? What if our sun went supernova? Could life on Earth survive another huge meteor strike like the one that took out the dinosaurs?

**KNOWN UNIVERSE** also takes an inside look at some of the world's biggest particle accelerators, fastest rockets and most powerful telescopes to see how science is put to the test in and out of the lab. We'll also hear from carefully chosen experts who have the ability to explain complex concepts in an interesting and easily digestible way.

### ***The three premiere episodes include:***

#### **KNOWN UNIVERSE: THE FASTEST Sunday, February 15, 2009 at 8 PM ET/PT**

This episode starts with the speed of things we are familiar with here on earth, like an Olympic sprinter charging to the finish line at 27 mph and a high-speed stock car racing along at 250 mph. On Earth we measure speed in conventional units, like miles per hour. But when it comes to exploring the cosmos, distance is often measured in light years — the distance light travels in one earth year, more than 6 trillion miles! And light is the fastest thing in the universe — it can bounce between New York and Los Angeles 75 times in just one second.

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**KNOWN UNIVERSE: THE FASTEST** tackles interstellar travel, wormholes and black holes as well as which of your favorite sci-fi movies get it right and which ones totally miss the mark. We also re-examine Einstein's theories and see how they might hint at the existence of portals that could reach through the very fabric of space and time, and allow us one day to achieve interstellar travel.

If the universe is billions of light years across, how will we ever travel to the outer reaches of the cosmos? We meet Dr. Chang-Diaz, a seven-time shuttle astronaut, who is developing a 200-megawatt plasma magneto rocket that can theoretically reach interstellar speeds of over 100,000 miles an hour. It's still not light speed, but it's an important development.

**KNOWN UNIVERSE: THE BIGGEST AND THE SMALLEST**  
**Sunday, February 15, 2009 at 9 PM ET/PT**

From the enormous universe in which we exist to tiny atoms that make up the building blocks of everything around us, size matters when it comes to understanding the cosmos. Starting with our solar system, **KNOWN UNIVERSE: THE BIGGEST AND THE SMALLEST** explores the true meaning of the word "big." Odds are you saw a model of the solar system made in grade school. With incredibly realistic CGI, we'll reveal how that model, if built to scale, wouldn't fit inside a football field, much less a classroom. Our neighborhood of planets may seem vast, but compared to the size of our Milky Way galaxy, our solar system is really tiny. And our galaxy is only one of about 100 billion galaxies in the cosmos. In fact, if they suddenly turned into peas, they could fill a sports arena.

But every giant object in our unbelievably expansive universe is made of tiny bits of matter — atoms. The atom is a universe within itself on a minute scale — 500,000 atoms could hide behind a single strand of human hair. Amazingly, the size ratio between an electron and the nucleus it buzzes around is equivalent to a fly inside a cathedral. Peer into the atomic world to see what holds together all the matter we can see, and hear from scientists who are using nanotechnology to design tiny structures on an atomic scale to develop lifesaving cures and ingenious inventions.

**KNOWN UNIVERSE: THE MOST EXPLOSIVE**  
**Sunday, February 15, 2009 at 10 PM ET/PT**

Scientists believe that our universe started with a colossal explosion called the Big Bang. That powerful blast created all the matter and energy in the universe and laid the groundwork for every explosion since. From gunpowder to exploding stars and asteroid impacts, **KNOWN UNIVERSE: THE MOST EXPLOSIVE** captures and deconstructs some of the biggest explosions in the universe with unforgettable CGI and slow-motion footage.

Even our biggest atomic weapons pale in comparison to the energy unleashed by earthquakes, volcanoes and hurricanes. And even a devastating earthquake would be tiny compared to what would happen if an asteroid six miles across slammed into Las Vegas. In spectacularly realistic CGI, we'll show you the impact and its blistering shockwave, with the potential to extinguish life on Earth. Then we'll visit the best-preserved meteor impact site in the world, the Meteor Crater in Arizona, to see what happened when a meteorite the size of a railroad car slammed into the earth. At the Sandia National Lab in New Mexico, we'll see how scientists have devised strategies to harness the sun's explosive power to divert one of these dangerous meteorites. They'll demonstrate the sun's incredible power as it melts a steel plate in seconds flat.

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Then we'll travel to deep space to witness an immense example of stellar power: a supernova. In a fraction of a second, a supernova can produce 300 times as much energy as our sun will generate over its 10 billion year lifetime. But even these explosions are dwarfed by a certain kind of supernova — gamma ray bursts, which happen when massive stars explode, shooting out jets of high-energy radiation. If one of these bursts occurred within a few thousand light years of Earth, the rays could burn off its atmosphere and leave our planet exposed to the sun's deadly ultraviolet radiation.

**KNOWN UNIVERSE** is produced by Base Productions, Inc., for the National Geographic Channel. For Base Productions, Inc., executive producers are Mickey Stern and John Brenkus. For the National Geographic Channel, executive producer is Chris Valentini; senior vice president, special programming, is Michael Cascio; and executive vice president of content is Steve Burns.

For more information visit, [natgeotv.com/knownuniverse](http://natgeotv.com/knownuniverse).

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### **National Geographic Channel**

Based at the National Geographic Society headquarters in Washington, D.C., the National Geographic Channel (NGC) is a joint venture between National Geographic Ventures (NGV) and Fox Cable Networks (FCN). Since launching in January 2001, NGC initially earned some of the fastest distribution growth in the history of cable and more recently the fastest ratings growth in television. The network celebrated its fifth anniversary January 2006 with the launch of NGC HD, which provides the spectacular imagery that National Geographic is known for in stunning high definition. NGC has carriage with all of the nation's major cable and satellite television providers, making it currently available to more than 68 million homes. For more information, please visit [www.natgeotv.com](http://www.natgeotv.com).

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