The "Big Bang"

Scientists are preparing to smash protons together in a 27-kilometre tunnel deep underground, in the hopes of detecting extra dimensions, 'dark matter' and the mysterious Higgs boson -- the so-called 'God particle.'

The experiments are designed to re-create what happened immediately after the Big Bang, which scientists believe created the universe around 13.7 billion years ago. About 1,000,000 years later the universe was sufficiently cool for atoms to form.

"As far as we know, a very long time ago there was an enormous amount of energy that suddenly created space and time as we know it," Bob Orr, a physics professor at the University of Toronto.

To be more precise:

"The Universe started with a Big Bang – but we don't fully understand how or why it developed the way it did. The LHC will let us see how matter behaved a tiny fraction of a second after the Big Bang. Researchers have some ideas of what to expect – but also expect the unexpected!"

And further:

"At the earliest moments of the Big Bang, the Universe consisted of a searingly hot soup of fundamental particles - quarks, leptons and the force carriers. As the Universe cooled to 1000 billion degrees, the quarks and gluons (carriers of the strong force) combined into composite particles like protons and neutrons."

The Large Hadron Collider (LHC) is the largest and most complex machine ever made. It has a circumference of 27 km (17 miles) and lies 100 metres (330 feet) under the ground, straddling French and Swiss territory. It is capable of engineering 600 million collisions every second. When two beams of protons collide, they will generate temperatures more than 100,000 times hotter than the heart of the sun. It costs 4Billion Swiss Francs.

The amount of data from the experiments will be so huge, 60,000 computers around the world will be used to help calculate the results. It's called the LHC Grid.

After a series of trial runs, two white dots flashed on a computer screen at 10:26 a.m. (0826 GMT) indicating that the protons had traveled the full length of the 4 billion Swiss francs (\$3.8 billion) Large Hadron Collider -- described as the biggest physics experiment in history.

The collider is designed to push the proton beam close to the speed of light, whizzing 11,000 times a second around the tunnel

Is it all that this experiment might achieve? One writer goes a bit further and reveals something really interesting:

"It is proof of the transformative potential of imagination first, and IT second; what you can do when you have big ideas, clear goals and the determination to make the tools do the job. Too often in enterprise IT — and elsewhere in human affairs — the tools set the agenda and soak up all the energy, time and money that should be spent on doing the real job.

The LHC will stand as proof that we can move beyond such restrictive thoughts; that we can create truly wonderful things — big and small — if we let ourselves. Medieval people had cathedrals that moved their souls but produced mostly bishops. We may count ourselves lucky that our modern cathedrals, for all they lie buried underground, are capable of so much more."²

OBSERVATION

1. Something sounds interesting here: We don't know what happened in the beginning, but we know there was a Big Bang! We don't know, but we know it was "searingly" hot. We don't know, but we know that the universe

¹ These two references are from the "The Big Questions" page of the official LHC UK website: http://www.lhc.ac.uk/the-big-questions.html

² http://news.zdnet.co.uk/leader/0,1000002982,39486546,00.htm

(pardon *Universe* – capital "U") "cooled to 1000 billion degrees". We don't know, but we know that matter behaved in some way a "tiny fraction of a second after the Big Bang." Definite statements made out of assumptions. Theory has become fact.

- 2. One wonders: who activated the Big Bang, if there was one? And where did the "matter" come from, if there was a Big Bang?
- 3. If we don't really know what the form of the matter was, and what the Big Bang really was, it then seems more and more realistic to read: "In the beginning God created the heavens and the earth. Now the earth was formless and empty; darkness was over the surface of the deep and the Spirit of God was hovering over the waters. And God said..." (Genesis 1:1-3)
- 4. If scientists find this a bit too far-fetched, well, sorry, I find their version too far-fetched.

COMMENT:

Option 1:

4 Billion Swiss francs, thousands of scientist and computers—to find out how it all began, but no one really knows anything more – at least for the moment.

Option 2:

\$10.00 for a Bible and faith like a child. You'll know where it all started, because God made it and sustains it wonderfully till the end of time as He ordained.