



RSE@Schools

## The Big Bang and the Little Echo

The Universe began with a Big Bang, but what was it? When did it happen, and will the Universe ever end? How do we know?

Evidence for the Big Bang comes in many forms; some of it is even sitting on your wrist in your digital watch, and some can be seen on a fuzzy TV screen. Most of the evidence however comes from Big Astronomy: from observations of hundreds of thousands of distant galaxies, and from satellites deep in space peering at the radiation left over from the Big Bang. We explore what we know and how we know it, and puzzle on the latest observations that have cosmologists scratching their heads - the strange Dark Matter and Dark Energy which seem to be all around us, but no-one knows what they are.

The talk is suitable for pupils 11+.

Professor Heavens is Professor of Theoretical Astrophysics at the University of Edinburgh. His research interests include exploring the properties of the Universe using light bending, the fireball radiation of the Big Bang, and the formation of galaxies.

### Curriculum Links

- 5-14 Science: Earth and Space
- Standard Grade Physics: Space Physics