

Statement of participation

Tithi Bose

has completed the free course including any mandatory tests for:

The Big Bang

This 20-hour free course provided an introduction to the theory of the Big Bang and the three main lines of experimental evidence that support it.

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www.open.edu/openlearn

This statement does not imply the award of credit points nor the conferment of a University Qualification.
This statement confirms that this free course and all mandatory tests were passed by the learner.

Please go to the course on OpenLearn for full details:

<https://www.open.edu/openlearn/science-maths-technology/the-big-bang/content-section-0>

COURSE CODE: **S357_1**

The Big Bang

<https://www.open.edu/openlearn/science-maths-technology/the-big-bang/content-section-0>

Course summary

This is the way the world ends / Not with a bang but a whimper.' (T.S. Eliot) But how about the way the world begins? Was this the biggest bang of all? This free course The Big Bang will introduce you to the theory of the Big Bang and will present the three main lines of experimental evidence that support this theory.

Learning outcomes

By completing this course, the learner should be able to:

- describe the characteristics of light emitted by stars, and hence the information of cosmological interest that can be deduced from it
- distinguish between true and false statements relevant to the distribution and motion of stars within galaxies, and of galaxies within clusters and superclusters
- outline the methods used for estimating the distances to stars and to galaxies
- explain and apply Hubble's law
- distinguish between various sources of redshift and estimate their relative importance in a given situation.

Completed study

The learner has completed the following:

Section 1

Introducing cosmology

Section 2

Radiation from the galaxies

Section 3

Distances of galaxies

Section 4

The variation of redshift with distance

Section 5

The microwave background radiation

Section 6

The angular distribution of the 3 K radiation

Section 7

The primordial nuclear abundances

Section 8

Conclusion

Section 9

Summary