

Senate Standing Committee on Economics
ANSWERS TO QUESTIONS ON NOTICE
Innovation, Industry, Science and Research Portfolio
Supplementary Budget Estimates 2011-2012
19 October 2011

AGENCY/DEPARTMENT: DEPARTMENT OF INNOVATION, INDUSTRY, SCIENCE AND RESEARCH

TOPIC: TIMING OF THE “BIG BANG”

REFERENCE: Question on Notice (Hansard, 19 October 2011, Page 33)

QUESTION No.: SI-156

Senator BISHOP: Within the scientific community is the beginning of time the big bang or is it time prior to the big bang? Does anyone know the answer to that?

Senator Carr: Why don't we take that on notice. As we have considerable strength in this field, it would be unwise for us to comment.

ANSWER

The current view of the astrophysics community is that the Big Bang was the beginning of time. Since that moment, it is estimated that approximately 13.7 billion years have elapsed.

At the beginning of time, the universe was singular, that is, all matter in the universe was contained within a single point. From that point, the universe started to expand and is still doing so. In fact the recent Nobel Prize winners (including Professor Brian Schmidt of the Australian National University) have demonstrated that the expansion of the universe is accelerating.