

The Big History of Our Planet: A Scientific Journey over 14 Billion Years of History

Assignment 1

Deadline: 1:00pm, Monday 9 July, 2018

We are often presented with the “correct” way to understand how our world works, such as “our universe expands and cools down from the Big Bang”, “our sun is powered by nuclear fusion at its core”. The road to establish these bodies of knowledge, however, is never straightforward. History, from time to time, has shown us examples in which a lot of effort was needed to settle the debate between competing theories.

In groups of 3 – 4 students, give a **historical account** of one of the following debates between theories:

- (i) **Big Bang cosmology** vs **Steady State cosmology**;
- (ii) **Lord Kelvin’s** vs **Hans Bethe’s mechanism in explaining how the sun shines**;
- (iii) **“gaseous regions”** vs **“island universes” as the true identity of distant celestial objects (the so-called “Great Debate”)**.

Your group should elaborate on **how each involved theory attempts to explain the concerned phenomena**, **why the theories were taken seriously by the contemporaries**, and **how the debate between the competing theories was settled in the end**.

Assessment Tasks

Each group will showcase their findings in **a group essay no more than 900 words (excluding references) due by 1:00pm, Monday 9 July, 2018**.

References

References should be properly included whenever you refer to others’ ideas and opinions. They are also important in enhancing the credibility of your arguments, by showing the readers that your arguments are based on evidences and facts from reliable sources.

You can choose your own style of referencing so long as an interested reader should be able to locate the references you provide.

Weight and Assessment Criteria

This assignment, together with (probably two) other assignments, will count for 40% of the course mark. Your essay will be assessed on their **contents**, and the **quality of the presentation**. You may refer to the corresponding document for more details about the marking descriptors.

Policy for Late Submission

The grade of your essay will be penalized by **20% for every day late**. Your essay will receive 0 mark if it is late by 5 days.

Plagiarism

Please be reminded that plagiarism is a serious academic offense and will be handled seriously with zero tolerance. This means you should provide proper citations whenever you quote others’ words or make use of others’ ideas. It would be even better for you to integrate ideas from several sources and re-express them in your own way together with your own opinions.