Philosophy of Science: The Alternative Views

Summer Semester 2012

Seminar — B4/V: Philosophy of Science (Elective Seminar)

Objectives: In-depth analysis of some themes in philosophy of science for advanced students.

Classes (weekly): Tuesday 10:00 - 12:00 - Classroom: RW S40

Assessment:

- 2CP: class attendance and participation + questions sheets submissions
- 8CP: 40% (class attendance and participation + questions sheets submissions) + 60% final paper (4000 words)

Description of the course

In this course we will look at some advanced topics in philosophy of science. The three sections of this course are divided according to three works in contemporary philosophy of science, Thomas Kuhn’s *The Structure of Scientific Revolutions* (1962), Philip Kitcher’s *Science Truth and Democracy* (2003), and Henry Collins and Robert Evans’ *Rethinking Expertise* (2007). In the first part of the course we will read some texts related to Kuhn’s landmark work on the progress of science, and try to answer a number of questions on the nature and drivers of scientific progress. In the second part we will be dealing with some topics addressed in Kitcher’s 2003 book: the relation between science and society, science and values, and the extremes of positivistic-worship vs. Foucaultian-distrust on the role of scientific research in society. In the third and last module we will look at the contemporary discussion on the role of experts and expertise in science: the sociological and methodological problems that the presence of human subjective judgment in scientific research involves.

Schedule of classes

★ The following list of readings might change slightly before the start of classes. ★

April 17, 2012

1. **Introductory Week**

2. **Required readings:**
   - T. Kuhn (1962) *The Structure of Scientific Revolutions* — Chapters I and II
   - Suggested Readings:
     - Chapter III

3. **Required readings:**
   - T. Kuhn (1962) *The Structure of Scientific Revolutions* — Chapters IX and XII
   - Imre Lakatos (1970) *Falsification and the Methodology of Scientific Research Programs*

4. **Required readings:**
   - T. Kuhn (1962) *The Structure of Scientific Revolutions* — Chapter XIII
   - May 16, 2012
SECTION II - Science and Values

5. **Required readings:**
   Kitcher, Philip (2003) *Science, Truth, and Democracy* — Chapter 1

   **May 22, 2012**

6. **Required readings:**
   Kitcher, Philip (2003) *Science, Truth, and Democracy* — Chapters 2 and 3

   **June 5, 2012**

7. **Required readings:**

   **June 12, 2012**

8. **Required readings:**

   **June 19, 2012**

SECTION III - Experts in Science

9. **Required readings:**

   **June 26, 2012**

10. **Required readings:**
    
    **July 03, 2012**

    **Suggested readings:**
    
    Chapter 1 and conclusion

11. **Required readings:**

    **July 10, 2012**

    **Suggested readings:**
    
    Chapter 1

12. **Required readings:**
    Roger Cooke (1991) *Experts in Uncertainty* — Chapters 1 and 5

    **July 17, 2012**

Main Bibliography


