What is this thing called science?

My PhD is in history and philosophy of science, a subject that I continue to teach in the honors collegium department to the finest students across all disciplines at UCLA. Having developed an introductory course called "What is this thing called science?" over a period of fifteen years or so, I now also bring these ideas to a wider audience of the general public.

My topic is therefore, What is this thing called science?

An examination into the main ideas on what distinguishes sciences from other approaches to knowledge and other world-views. Why is science so successful in raising our standard of living while many other world-views come and go and cannot claim to produce 'progress' in the same way that science can.

I draw on the views on major philosophers and historians of science who have pondered these questions, including Karl Popper, Thomas Kuhn who made the term 'paradigm' famous. In recent years the dominance of scientific knowledge has been challenged by many thinkers and this has led to the so called 'science wars' in which the very objectivity of science has come under criticism from some historians, sociologists and other post-modern thinkers. I discuss these developments and try to reach some conclusion about the evolving role of science in modern society.

The lecture will give an introduction to these thought provoking notions such as Poppers idea of refutation through which he hoped to demarcate between science and pseudo-sciences such as astrology. It will examine the view of Kuhn whereby scientific developments occur through revolutions and involve changes between paradigms which occur for non-rational reasons.

I will consider the views of two other very prominent philosophers science of the 20 th century, namely the charismatic Hungarian Imre Lakatos and the outrageous Austrian of Paul Feyerabend who have electrified the field in their various ways.