Announcements

• A preliminary schedule for the end-of-course individual meetings is given below. Check to make sure the meeting time for you is OK – if it is not, we will try to arrange a swap with another student’s time. On Wednesday, a final schedule will be given out.

• Announcing a unique offering from the Natural Sciences at Hampshire next semester:
Do you like *discussions*? Has Inventing Reality sparked interests in areas that you would like to know more about? Do you long for a time and place where you can pursue and share thoughts and ideas for as long as you like, without having to be constrained by an agenda or the constant need to make it through a syllabus? Then the **Astronomy Roundtable** is for you!

Next semester (Fall, 2002), I will not be teaching a course. However, I will be leading an *Informal Discussion Group* on all things astronomical (naturally, this can include physics, philosophy, or just about anything else the participants find interesting). It will meet at the same time and place that Inventing Reality has met (i.e., Mondays, at 2:30, Rm. 333 Cole). You can come and stay for as long (or short) as you like. There will be no assignments, projects, or formal evaluations; you can come as often as you like.

Driven strictly by the interests of the participants, this weekly gathering will provide an opportunity for students to discuss and ponder current theories, discoveries, and research in astronomy. There will be guest speakers, presentations, and wide-ranging discussions. The necessary introductory material will be provided for all astronomical topics considered.

Want more information? Ask me, or check out:

http://helios.hampshire.edu/~dcNS/roundtable

**Assignment for Wed., May 1**

There are two selections to read in preparation for our final class.

  The conclusion to David Griffiths’ wonderful text on quantum mechanics first reviews the three major interpretations of quantum mechanics, the realist, Copenhagen (or “orthodox”), and the agnostic, on p. 235. After a discussion on Bell’s inequality (not included in the Reader; it follows along similar lines to what we’ve done in class, although it uses calculus-based examples. Also, instead of considering two electrons for the correlation experiment, as we did in class, you will see references to an electron and something called a “positron”, which is essentially a positively charged electron.) p. 236 informs us that the experiments have agreed with the orthodox position’s predictions, and are incompatible with the realistic viewpoint. This means that “nature itself is fundamentally non-local”; that is, some kinds of influences can travel at speeds exceeding that of light. Griffiths then goes on to ask: Why are physicists so alarmed by this notion? And, ultimately, does this then violate Einstein’s theory of relativity?
  Finally, on p. 237, the famous Schrödinger cat paradox is presented, and the resolution that is commonly given by physicists today is put forward. Although it is possible, then, to follow a self-consistent theory of quantum mechanics, Griffiths allows for the distinct possibility that “it is entirely possible that future generations will look back, from the vantage point of a more sophisticated theory, and wonder how we could have been so gullible.”

- **Albert Camus’ *The Myth of Sisyphus*** (included in this handout – **see the next page**).
The Myth of Sisyphus

Note: Camus’ Myth of Sisyphus is on the back of this page!

The Myth of Sisyphus was little known and well-filed in those libraries of archaic lore which rarely see the light of day until Albert Camus came along. In 1942, he repopularized Sisyphus and the suffering he went through. It seems that, due to a “certain levity in regard to the gods”, Sisyphus had been condemned to pushing a stone up a hill for eternity. Every time the stone reached the top, however, it would roll back down, forcing him to roll it up again—and, we would surmise, to endlessly face disappointment along with physical pain and laboring. As you read this, ask yourself: Given such a terrible fate, how is it possible for Camus’ to end with the line: “One must imagine Sisyphus happy”? (See the “Thought Question” below.)

Note that Camus makes reference to a number of other myths, fables, and stories in this short work, mostly inherited from the ancient Greeks. Although it is not necessary to understand all of these references to grasp the big picture of what Camus is saying, here are brief descriptions of two of them, to assist you read along:

“Nights of Gethsemane”: Gethsemane is mentioned in the Bible as the location to which Jesus and his disciples retreated prior to his arrest and ultimate crucifixion. This occurs after the Last Supper, and it is in this place that Jesus most starkly confronts his impending death. He asks his disciples to remain awake with him throughout the night, but they fall asleep, underscoring both their humanity and Jesus’ complete isolation at this time.

The story of Sophocles’ Óedipus: A story by the ancient Greek poet Sophocles, first performed in about 425 BC. The basic plot is that, shortly after Óedipus is born, his parents (his father is a king) learn from an oracle that he will kill his father and sleep with his mother. They decide to kill him, and give him to a slave to be “exposed” on nearby Mt Cithaeron, a haunt of wolves and other wild beasts. The slave takes pity on the baby, and instead of leaving it to die, gives the boy to a fellow-shepherd from Corinth, the other side of the mountain. To make the long story short, Óedipus lives, and ultimately (although unwittingly) fulfills the prophesy. This story is used by Camus as an example of a person who evidently has lived according to a horrible pre-determined fate, and yet, near the end of his life, is able to conclude that “all is well”.

Thought Question for the Final Class

There is no writing assignment for the final class. Rather, read the short philosophical work by Albert Camus (1913-1960), The Myth of Sisyphus, and ponder this question as you read the final sentence of the work:

Why must one consider Sisyphus happy?

This will form the backdrop for Wednesday’s discussion.