

A few thoughts/questions to keep in mind while reading the material for the week of April 4

This week the reading takes us deeper into cosmology. As you read, consider what are the major problems with the big bang. What is the basic concept of inflation? Don't worry too much about the exact mechanism of what drives inflation, but know about the basic idea. How is it that inflation provides solutions to the problems posed by the big bang? Why is it important that physicists have observe slight nonuniformities in the cosmic microwave background (CMB)? How do we know small uniformities in the color/temperature of the CMB *must* be present if the CMB originates in the big bang? What experiments detected the structure in the CMB? What kinds of things are we able to learn about by studying the structure in the CMB?