Dear ASP Student,

The three discussion seminars at 14.00-16.00 hrs on Wednesday 25, Thursday 26 and Friday 27 July that I will lead will be based on the three following chapters in the book "The experimental foundations of particle physics" by R.N.Cahn and G.Goldhaber;

- 1. The Top Quark date 25/7
- 2. Testing the Standard Model date 26/7
- 3. Neutrino Masses and Oscillations date 27/7

As participant in my discussion seminars you are asked to read through the Top Quark chapter well before Wednesday 25/7, write down three questions that you have on the text and send these questions to the email address given below by the very latest 11.00 hrs on 25/7. We will start the discussion seminar that day with a short review of that chapter. This will be followed by a general discussion in which we will try together to answer together the questions that have been sent in. Those questions, which do not receive a satisfactory answer during the discussion, will be assigned to students attending the seminar with the instruction that they should try to find out answers to the questions till the following day, using Internet and Google.

For the second seminar you are asked to read through the Testing the Standard Model chapter well before Thursday 26/7, write down three questions that you have on that text and send these questions to the email address given below by the very latest 11.00 hrs on 26/7. We will start the discussion seminar that day listening to short presentations of answers to the unanswered questions from the previous day on the Top Quark chapter given by the students that have had these questions assigned to them. For these presentations the students are encouraged to prepare brief PowerPoint presentation but presentations at the blackboard will also do. This will be followed by a general discussion in which we will try to answer together the questions on the Testing the Standard Model chapter that have been sent in before 11.00 hrs the same day. Those questions, which do not receive a satisfactory answer during the discussion will, as the day before, be assigned to students attending the seminar with the instruction that they should try to find out answers to these questions till the following day, using Internet and Google.

For the third seminar you are asked to read through the Neutrino Masses and Oscillations chapter well before Friday 27/7, write down three questions that you have on the text and send these questions to the email address given below by the very latest 11.00 hrs on 27/7. We will start the discussion seminar that day listening to short presentations of answers to the unanswered questions on the Testing the Standard Model chapter from the previous day given by the students that have had these questions assigned to them. For these presentations the students are, like before, encouraged to use PowerPoint presentation but presentations at the blackboard will also do. This will be followed by a general discussion in which we will try to answer together the questions on the Neutrino Masses and Oscillations chapter that have been sent in before 11.00 hrs the same day.

Tord Ekelof Seminar Leader at the APS School

The 3 x 3 questions should be sent to the following email address; Tord.Ekelof@physics.uu.se