

Interactive Physics Workshop 1999

Description of Events

Prior to the workshop:

Teachers will receive a handout on the general features of Interactive Physics and the method behind creating labs using this program.

Teachers will also receive seven sample Interactive Physics labs and a handout describing how each lab can be used to solve specific problems in physics.

A schedule of events for the Interactive Physics workshop will be distributed to all participants.

Day 1

Introduction to the Interactive Physics program begins.

This day's activities will be based on the material given out before the workshop. To refresh everyone's memory, participants will be asked to share any key points they came across during the reading for a few minutes.

There will be an informal question-and-answer session, lasting at least fifteen minutes, so that any questions or thoughts can be addressed before the next portion of the program.

The next portion will be an introduction to writing Interactive Physics labs. We will begin with the simple DVAT lab, which should be on everyone's monitors. Because this may be the participants' first real experience with the Interactive Physics program, a brief explanation of this lab, basically a recount of the description in the handout, will be given to acclimatize participants to the appearance of an Interactive Physics lab.

A guided tour of the DVAT lab will be given. The function of each object or control on the screen will be explained, along with how each of these items were created. This tour will be open for questions at any time.

To conclude this day, a brief assignment will be given to the participants. They will be asked to come tomorrow with ideas for a simple lab they might like to create, and how they may be able to do this using Interactive Physics features.

Day 2

This day's activities will focus on showing participants how to bring their lab ideas to life.

The first half of today will be spent going over each of the seven sample labs. Each lab demonstrates the use of one or more different Interactive Physics features, and by explaining the purpose and function of these features in each lab, the participant may become more familiar with how these features can be used.

The second half of today will be spent discussing yesterday's homework assignment. One volunteer will be asked at a time to present his or her lab ideas. The participants will then be asked to briefly brainstorm for ways Interactive Physics can be used to create the proposed lab. After this period, the participants will be encouraged to openly share their ideas, and based on their ideas, a lab created solely from combined participant input will be made. We will follow their directions in building the lab, and as it is being built, it should be broadcasted to all the participants so they can see their ideas at work. If there is time, another volunteer from a different cybercampus will be given the opportunity to share his or her lab ideas. As many volunteers as possible should be given the opportunity to share.

Before the day ends, another brief assignment will be given to the participants. Based upon what had been learned during the past two days, participants will be asked to transform their simple lab ideas into a functional lab.

Day 3

Conclusion of the Interactive Physics Workshop

This day's activities will focus on addressing any questions about Interactive Physics, and in exploring the possibilities for labs.

There will be a short question-and-answer session to start the day. In turning their lab ideas into working labs, the participants undoubtedly would have run across a few questions. After all questions have been addressed, volunteers from different cybercampuses will be asked to share their labs with the group. This activity will help participants to explore possible ideas for labs, and to see how these labs were created. This will also be another opportunity to address questions based on these labs.

During the last portion of the day, volunteers will be asked to describe how they felt about Interactive Physics, and to describe any comments they had about this workshop. Other concluding activities may also be planned.