Survey

The Carl Wieman Science Education Initiative (CWSEI) is devoted to improving science education at UBC The survey we are asking you to do on-line is to monitor student perceptions about physics. Your instructor has kindly agreed to give you bonus marks for doing the survey. The survey should take less than 15 minutes. The results of the survey are only useful if students take the survey seriously. Thank you for your cooperation

UBC Physics Learning Attitudes about Science Survey

Completing this survey by the end of the day (midnight) on Thursday, September 16 will earn you a bonus 0.5% grade in the course (meaning that I will add 0.5/100 to your final course grade). You will have a chance to earn another 0.5% towards the end of the course when you take the same survey again for comparison.

Go to WebCT Vista for the link

A couple more things...

There will be office hours on Tuesday, 12:30-2:30, in Hennings 302. One of your TAs will be there to answer questions about homework and anything else.

When you are doing a reading quiz, don't forget to SAVE your answers before you submit the quiz! Alice and Bob are hurtling through space in sealed, windowless, spacecrafts. Is there an experiment which each of them could perform that would indicate that one of them is moving faster than the other (meaning, an experiment which would yield a larger answer for, say, Alice than for Bob)?



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Since the laws of physics don't depend on how fast they are moving, all experiments will return exactly the same answers on both ships. Which assumptions did we make when analizing this scenario?

A) That different observers agree on time differences

B) That different observers agree on distances

C) That different observers agree on charges

D) All of the above

E) B and C only

Which assumptions did we make when analizing this scenario?

A) That different observers agree on time differences - yes, otherwise acceleration would not be the same (Galilean transformation)
B) That different observers agree on distances - needed to get the same electrostatic force
C) That different observers agree on charges

D) All of the above

E) B and C only

Assume that aether does exist - what is your answer to the first clicker question now?

Alice and Bob are hurtling through space in sealed, windowless, spacecrafts. Is there an experiment which each of them could performed which would indicate that one of them is moving faster than the other (meaning, an experiment which would yield a larger answer for, say, Alice than Bob)?

A - yes B C D E - no



R

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A and B should be able to measure their speed relative to the eather, by comparing the speed of light in different directions



B

Which of the following facts would explain the result of the Michelson-Morley experiment:

A) The aether moves with the Earth

B) Speed of light is always equal to c if measured with respect to the source

C) There is no eather, the speed of light is c with respect to all observers in all frames of reference

D) Any of the above

E) Only A and C but not B

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