

DIAGNOSTIC: This is not a quiz!

COURSE: Physics 208, General Relativity (Winter 2017)

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Please spend no more than 10 minutes answering this questionnaire and submit it by the end of lecture. You **do not** have to put your name on it. The purpose is for me to get a feel for your background and goals for this course.

1 Your background

1.a Year in grad school:

1.b Adviser/Group/Field:

1.c Relativity background:

Please indicate the most advanced relativity course you've had (e.g. graduate electrodynamics, prior general relativity course) and the textbook(s).

1.d Goals for this course:

What topics do you want to learn? Why are you taking this course?

1.e Anything I should know?

Is there anything I should know about you for this course? (e.g. auditing only, will have to miss part of the course, or *unusually* large workload this quarter preventing full participation) Do you have any concerns about the course?

2 Diagnostic Questions

On the back of this sheet, please attempt to answer the following questions. (It's okay if you are unable to answer some or all of them.)

1. What is the metric for a 2D Euclidean space ("ordinary flat 2D space") in polar coordinates?
2. How does the electromagnetic field transform under a Lorentz transformation?
3. The term 'position *vector*' is often used in introductory physics. Why is it a poor phrase in general relativity?
4. What is the action of a relativistic particle in a general spacetime?