

Letter of introduction

Your first assignment is to write me a rather long letter of introduction, so that I can get to know about your interests and background.

Please email it to me sometime this week. My email address is lguth@math.mit.edu

- General information.

What have you mainly been studying in the last semester or year? What are one or two things that have been particularly interesting? (And/or, you can mention something that has been frustrating.)

- Geometry background.

Tell me about your background in differential geometry. What classes have you taken? (Also, if you've done some reading on your own, what have you read?)

How familiar do you feel with differential forms? The Riemann curvature tensor? How much have you seen before about the topics from our syllabus? Have you seen transversality? Vector bundles? Connections and curvature? Morse theory?

What was your impression from learning differential geometry so far? Are there parts that have been confusing or frustrating?

- Topology background.

Can you tell me the same kind of things about your experiences with topology?

In particular, have you seen homology groups? Cohomology groups? Poincare duality? Homotopy groups? Cup products? Cell complexes?

- Is there anything else you'd like me to know about you?