

Homework 1: Einstein Drawing and Reading Reflections #1

Introduction

Due: Wednesday, January 9

Readings: From the Reader:

Einstein, Albert (1936). **Physics & reality**;

Livio, Mario (2000). **Beauty and the Beast**

From Zee: Chapter 1, **In Search of Beauty**

1. Reflections on Einstein's Article

- (a) Write a paragraph or so, explaining what you think Einstein is saying, in your own words.
- (b) Try visualize in your mind what Einstein is talking about regarding the nature of science. Draw a pictorial representation that reveals the way you conceptualize/visualize what Einstein is trying to say about physics and reality. If you need to write a few lines of explanation, feel free to do so.
- (c) After you have completed your drawing, try to answer these questions:
 - What is your reaction to being asked to draw your visualization to an article?
 - Was it natural for you, or totally weird?
 - Do you visualize concepts easily? If so, how? Can you describe your internal process of visualization?

2. Reflections on Livio and Zee

- (a) First write a short summary of what you think each author is saying.
- (b) Second, react to these two authors. What stands out from their essays in your opinion? Do you agree? Disagree? Do these two authors agree with Einstein, or ...? What do you think?
- (c) Third, have you ever thought of Physics as being beautiful before? If so, in what way? If not, how have you thought of Physics before?

Please bring your answers to class next time so that we can talk about them. You can email them to me, except please do bring the drawing to class, and be prepared to share it around.

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☞ Thanks! ☞