

Homework 15

Due Tuesday, April 9th in class

Read Chapter 12 of J & F-R “Standard Time” and Chapters 9 & 10 of Rovelli.

1. Using the simulated data that Hal shared with you in class on Thursday (and which you can download in both pdf and excel file formats on the homework site), invent a quantitative measure that will characterize their spread, but doesn't suffer from the same problem as the standard deviation. That is, you would like for your measure not to change when you include larger and larger portions of the data.

The spirit of this problem is the same as that of the baseball pitching machines that we did in class. We want you to explore ways in which this might be achieved, but there is not a single ‘right’ answer. The goal is to understand the strengths and the weakness of the measure that you come up with.

2. Explain the strengths and weaknesses of the measure that you have invented.
3. (Optional) In Chapter 10, Rovelli introduces the term ‘indexicality’. In your own words, explain what this term means. What role is indexicality playing in the beginning of his efforts to recover time?