Philosophy 395S: Space and Time
P. Bricker
Fall, 2016

# Assignment

Do one of the following. (Or, if you're feeling ambitious, do both and get credit for two assignments.) We talked about both of these in class. You should try to clearly present the issues we discussed in class, maybe adding a thought or two of your own. Due Tuesday before class.

1. A pure vacuum, let us say, is a region of space from which everything material has been removed. (I am counting light, and other forms of electromagnetic radiation, as material; so there may not be any such thing as a pure vacuum in our world.) Would the existence of a pure vacuum support the substantivalist view of space? How might a relationist respond?

2. If there is absolute time, then there can be time without change: time can pass even though the universe is frozen during that interval of time. Could we ever have evidence that there is time without change? A famous philosophy article argued we could if, for example, the universe divides into three regions – A, B, and C – and we discover that region A freezes, say for a year every 5 years, region B freezes for a year every 7 years, and region C freezes for a year every 11 years. That would provide evidence that the entire universe freezes every 385 years. (Explain why?) Would the reductionist accept this conclusion that there was time without change throughout the universe? What sort of anti-reductionist would accept it? Discuss.