### Why be a Humean? Tim Maudlin

Divides Humean Supervenience into two logically independent propositions:

- 1. Separability a set of localized points and their spatio-temporal relations determines the state of the universe (think pixels)
  - 2. Physical Statism all the facts about the world can be determined by its physical state

#### This leads us to

- a) the state of the world can be described completely without mentioning laws
- b) no two worlds with the same physical state could have a different set of laws, modal properties, chances or causal connections

# Separability -

Seems to be contradicted by the quantum wave function since electrons can have properties that exist only in relation to each other.

# Physical Statism -

Runs contrary to practice of science. Two different theories (sets of laws) can describe the same set of observable facts, contradicting b) above. Examples are probabilistic laws and special relativity.

## So Why be a Humean?

Starts with Hume, but his empirical theory of ideas has been discredited People don't want to say laws are occurrent for various reasons

Mass = occurrent fragility = not occurrent

Laws are then occurrent in some sense since they cannot be reduced to physical properties

But doesn't this mean that two worlds could have exactly the same physical state but a different set of laws??? Wouldn't we know the difference???

- Just because laws are not knowable (observable) doesn't mean that they do not exist, if knowability is criteria for existence we are in trouble (what about Socrates blood type?)
- We can induce the existence of laws from what we do observe

Question for Maudlin: He seems to be relying an awful lot on the scientific method at times, but isn't that what's on trial here?