

AGPhil 10: Philosophy of Cosmology IX

Zeit: Donnerstag 14:00–14:30

Raum: HS 10

AGPhil 10.1 Do 14:00 HS 10

Experimentally proven; an argument used to justify mythological concepts and entities in theoretical physics. —

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Established theoretical models were adapted over time introducing fictitious entities to explain new experimental data that didn't fit with the prevailing theory. Examples are gluons, gravitons, Higgs, dark matter, dark energy, time dilation, length contraction, etc. The result is a monumental patchwork without a strict internal logical structure and with paradoxes. A very often used argumentation to justify mythological entities is that they are experimentally proven, based on measurements which indirectly show consistency with the characteristics that

were previously assigned to the mythological entities. The argument 'Experimentally Proven' avoids that new models build on well proven physical interaction laws are pursued by scientists, models which can explain the new experimental data without fictitious entities. Fictitious concepts or entities (time dilation) can be the result of mathematical approaches (special relativity) or are directly introduced (dark matter) with the required characteristics to explain the new experimental data (flattening of galaxies' velocity curve) that doesn't fit with the current model (Newton gravitation). This shows the necessity to recognise when the argument 'Experimentally Proven' is a real justification or simply a fallacy to justify mythological concepts. More at www.odomann.com