



Contribution ID: 89

Type: plenary

## How to justify the history of the universe?

*Saturday 17 September 2016 12:30 (1 hour)*

The laws of physics not only allow for, but also enforce, in a sense, the origin of structures, even of such complex structures as living organisms. However, they mercilessly watch the balance: the grow must remain in agreement with the second law of thermodynamics –everything has to tend to the thermodynamical equilibrium, that is to say to the thermal death. Even the most stable structures must finally surrender to the statistical chaos. Physical evil: suffering, death, decay, find they *raison d'être* in the structure of the Universe. They are a price for the very possibility of life.

But what about moral evil when, for instance, a human being, making use of a physical evil destroys another human being? Moral evil appeared in the history of the Universe together with a being able to choose between good and bad. Before that there existed physical evil but the Universe was morally innocent. The existence of moral evil does not find its *raison d'être* in physical laws. It transcends physics.

Among various attempts to answer Leibniz's question "Why is there something rather than nothing?" there is one, especially rich in consequences. It claims that something exists because it is good. This is an echo of Plato's "the good and right ... hold and bring things together" (Phaedo). In this perspective, existence and goodness are interchangeable (*esse* and *bonum* convertuntur).

If goodness justifies existence then it also justifies rationality since everything that exists is implacably rational. It follows that evil is irrational and as such it cannot be rationally justified. This gap in rationality is tolerated since the Universe with evil and freedom (to make evil) is supposedly better than the Universe without evil and without freedom.

This story is told on canvas of a cosmological scenario.

### Summary

**Presenter:** Prof. HELLER, Michael (Vatican Astronomical Observatory; Copernicus Center, Kraków, Poland)

**Session Classification:** [Phil] Philosophy and cutting edge of physics and cosmology