A PHILOSOPHICAL CHOICE BETWEEN INDIFFERENCE PRINCIPLE AND FINE-TUNING PRINCIPLE

Summary

We formulate a cosmogonic indifference principle in cosmology in terms of a dynamical system theory. While the choice between generic and fine tuned initial condition for our Universe has a rather philosophical character, there is a very generic set of initial conditions which give rise to the concordance inflectional ΛCDM model which becomes in good agreement with astronomical observations.

Summarised by Authors

- **Słowa kluczowe:** zasada szczególnego dostrojenia, zasada indyferentyzmu, zasady wyjaśniające Holtona, Wszechświat jako globalny atraktor w przestrzeni fazowej.
- **Key words:** fine-tuning principle, indifference principle, Holton explanation principles, the Universe as a global attractor in phase space.

Information about Authors:

Dr. MAREK SZYDŁOWSKI – Chair of Theoretical Physics, Faculty of Philosophy, The John Paul II Catholic University of Lublin, and Department of Theory of Complex Systems, Institute of Physics of the Jagellonian University, Krakow; address for correspondence: Al. Racławickie 14, PL 20-950 Lublin; e-mail: uoszydlo@cyf-kr.edu.pl

Rev. JACEK GOLBIAK, MA – Chair of Theoretical Physics, Faculty of Philosophy, The John Paul II Catholic University of Lublin; address for correspondence: Al. Racławickie 14, PL 20-950 Lublin; e-mail: jgolbiak@kul.lublin.pl