## The Rationality of the Non-random Formation of our Universe

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Abstract: The General Intelligent Design (GID) Model interpretation of the General Grand Unification (GGU) Model verifies the rationality of the Kaku statement that we live in a universe "governed by rules that were created, shaped by a universal intelligence and not by chance."

## 1. The Michio Kaku Statement.

"I have concluded that we are in a world made by rules created by an intelligence. Believe me, that everything that we call chance today won't make sense anymore. To me it is clear that we exist in a plan which is governed by rules that were created, shaped by a universal intelligence and not by chance" (James, (2016)).

## 2. The GID-model Interpretation.

"The intelligent design features of the GGU-model [GID] are based entirely upon language, symbolic representations for languages, and abstractions" (Herrmann., (2002, p. 186)).

"We have the habit of combining certain concepts and conceptual relations (propositions) so definitely with certain sense experiences that we do not becomes conscious of the gulf - logically unbridgeable - which separates the world of sensory experiences from the world of concepts and propositions (Einstein,(1944, p. 289)).

"The fact that it [the universe] is comprehensible is a miracle (Einstein, (1936, p. 0.61)).

[Note: For an in-depth discussion of the origins of language, see Herrmann (2002), Section 5.5.]

Trivially, there are no natural laws or rules displayed by nature itself. No measurements are stamped upon physical objects by physical forces. We did not "see" the expressions "F = ma" and "E =  $mc^2$ " displayed anywhere within the material universe until they were symbolically expressed by "intelligent" life-forms via strings of symbols.

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A great deal has been written about this remarkable fact, but this is not the purpose of this article.

Mathematical Logic is the investigation of language and processes that employ strings of symbols to obtain deductive conclusions. Universal Logic is a more general approach applied to general languages. Such languages include images, diagrams and other symbolic devices. "Icon" logic, for example, is illustrated in Herrmann (2002, p. 66). The GGU-model employs Nonstandard Analysis, which is an extension of the standard mathematics used to model physical behavior within our universe. Nonstandard Analysis is an extension of standard mathematics and as such can be used to analyze not just standard mathematics itself but also the very models standard mathematics produces. The GGU-model employs concepts taken from universal logic in order to analyze and model the fundamental construction of the basic physical models used to describe physical-systems and their behavior. It is a mathematical cosmogony.

A published book and an in-depth refinement found in a series of articles published in journal and archive form have shown that the above Kaku statement is a rational statement based upon the mathematical GGU-model and its GID-model interpretation.

Relative to so-called random physical behavior that is claimed as a foundation for modern physics and predictive probabilistic models, there is a rationally presented model that shows "The Wondrous Design and Non-random Character of 'Chance' Events" (Herrmann, 1999).

Relative to the concept of our universe being "shaped by a universal intelligence," the book "Science Declairs Our Universe IS intelligently Designed," (Herrmann, 2002), presents an unrefined rational model for this proposition. This model and its GIDmodel interpretation have been highly refined in a series of articles. These include, among many others,

Nonstandard Ultra-logic-systems Applied to the GGU-model (Herrmann, 2013a).

The GGU-model and Generation of Developmental Paradigms (Herrmann, (2013b)).

The GGU-model Ultra-logic-systems Applied to Developmental Paradigms (Herrmann, (2013c)).

Archived versions of these articles are listed in the references.

## References

Einstein, A. (1944), Remarks on Russell's theory of knowledge. In P. A. Schlipp (ed.) *The Philosophy of Bertrand Russell*, Tudor, New York, pp. 277 - 291.

Einstein, A., (1936), Physics and Reality, In *Einstein - Out of My Later Years*, Citadel, Secaucus, NJ.

Herrmann, R. A., (2013a), Nonstandard Ultra-logic-systems Applied to the GGUmodel, http://vixra.org/abs/1308.0125

Herrmann, R. A., (2013b), The GGU-model and Generation of Developmental Paradigms, http://vixra.org/abs/1308.0145

Herrmann, R. A., (2013c), The GGU-model Ultra-logic-systems Applied to Developmental Paradigms, http://vixra.org/abs/1309.0004

Herrmann, R. A. (2002), *Science Declares Our Universe IS Intelligently Designed*, Xulon Press, Fairfax, VA (and other addresses)

Herrmann, R. A., (1999), The Wondrous Design and Non-random Character of "Chance" Events, http://arxiv.org/abs/physics/9903038

James, B., (2016, (6/13/2016)), Michio Kaku Proves Existence of God, http://www.scienceworldreport.com