

The limits of mathematics

Mathematics in physics is like salt in the soup. Without mathematics, it does not work, but too much of it is also bad. The mathematics used in physics rather than a substitute for the lack of perception. What we are not able to observe and in most cases, do not understand the underlying principle, shall made comprehensible to us by mathematical laws. We use mathematics as a tool, as a sort of magnifying instrument such as a microscope or telescope.

Mathematical laws and derived formulas contain hidden principles in it, which are transferred to reality in physics. In what extent these abstract principles do reflect the reality is, however, questionable. Even though they only account for some aspects, they are based on abstract principles that cannot always be transferred into reality. With mathematical formalism, the depicted reality can be distorted because the axiom, established with human logic is made about reality.

Chaos theory has already taught us with the "butterfly effect" that the smallest influences can alter a dynamic system totally. This principle also applies to the mathematical formalism. A hidden property of a mathematical proposition can totally change the described system. And the more complex an equation is, the less likely is its counterpart in reality. Therefore it is possible to formulate basic physical phenomena with short equations. Nature does not calculate and how can it be explained by complex formalism?

Nature knows no mathematics, and therefore it is not possible to explain nature with mathematics. Even thanks to our human logic on which mathematics is based, we are able to win many interesting findings, there are only rough approximations to reality. It can be tried to come closer to reality with sophisticated computational acrobatics. But reality cannot be calculated exactly. The "Chaos theory" has shown this to us with dynamic systems, and the universe is quite dynamic and surely makes no assumptions about our human logic.

In the new world model I also have used mathematical equations as a formalized language. But I was well aware that it is only a rough approximation of reality. Nature knows no universal formula, and this formula is only an attempt to explain the basic principles in the universe with our human logic.

To put it in the words of Albert Einstein, who once said "God does not play dice": God does not calculate, he rolls. But, in another way than we can imagine. In the space creation God plays dice, and makes the universe as a dynamic system and thus unpredictable.

However, we can still try to understand the universe as God's work with our mathematical approximations and our intelligence.