

Mathematisches Kolloquium

Wittgensteins Philosophy and the Creation vs. Discovery Question of Mathematics

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Over the span of tens of thousands of years, humans have created an elaborate body of theory unequalled in size and complexity: mathematics.

There is a profound philosophical question: Where do all the results of this gigantic body of theory come from? Are they already present in some hidden, possibly metaphysical, location and then discovered by inquisitive minds, or are they created in the same way that engineers design various machines for energy conversion, production of goods, or transportation?

Over hundreds of years, this question has been answered in various, often diametrically opposed, ways.

We examine this question using the approach of the philosopher Ludwig Wittgenstein for the resolution of philosophical problems.

With the help of modern brain science, we also look into the strange aspect that eminent researchers arrived at and vigorously defended diametrically opposed answers. Indeed, that amazing process is ongoing today.

The talk is based on the book “The Construction of Mathematics: The Human Mind’s Greatest Achievement.” It assumes no prior knowledge in mathematics or philosophy.