

Mathematics: art or science?

Stanislav Smirnov

Université de Genève, St Petersburg University, Skoltech

sksmirnov@gmail.com

Mathematics is an amazing and mysterious science. Ever since the time of Plato, philosophers argue whether mathematical objects are imaginary, or whether they come from the real world, while mathematicians mostly prove theorems without even asking about their link to reality. On the other hand, the Pharaohs of Egypt and the Kings of Babylon had already grasped the practical power of mathematics, and of course the technological advances of the past two centuries are built on successful applications of our science.

We will discuss the mathematician's perspective on

- where does mathematics come from?
- why is the "imaginary" science so useful in real life?
- how we choose problems to work on, and why do we find our science so fascinating?

We will not be able to answer all these questions in our talk, but we will try to give a glimpse of how mathematicians work.