

Intuition and evidence in mathematics

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20.05.2010 17:30

Auditoire B02 Campus Kirchberg

According to a widespread opinion, what makes an idea a conception of intuition is that it should be significantly analogous to perception. Indeed, this approach would not be very helpful in mathematics: one could not even construct an intuitive model of arithmetic that includes the axiom of complete induction. I will discuss the question whether there is some essentially different conception of intuition that would give a different answer. In the spirit of Nelson Goodman, I argue for the thesis that the difference between the multiple ways to find cognitive evidence depends neither on the status the involved objects may have nor on the cognitive capacity used. Rather it is determined by the pragmatic use one makes of the formal system implied.

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