Institute of Philosophy
Filosofický ústav AV ČR

Seminars of the Department of Logic

How do we intuit mathematical constructions?

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Abstract: The construction of objects by means of effective rules is no doubt an essential part of our mathematical experiences. But is there any sense in which intuition grants us epistemic access to our constructions? My aim in this talk is to argue that we gain intuition of some elementary constructions such as numbers, tuples, or booleans via objects of intuition founded on basic acts of the intellect. I will mainly draw on ideas advanced by Brouwer and Tieszen on how our intuitions can be mediated by acts of perception, pairing, reflection, and rule-giving and rule-following. The view I propose is that certain constructions are intuited as abstract points through imaginative variations of perceived objects into representations of abstract points, while others are intuited as abstract pairs through reflection on the pairing act of an abstract point with one or more given objects of intuition.

Thursday, May 20 at 14:00

Zoom Meeting:
cesnet.zoom.us/j/96869302116?pwd=bHlFektFMi9lZXBUeDd5WHM0RmE3QT09
Meeting ID: 968 6930 2116
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