IUSS Philosophy Seminars L&PIC – Linguistics and Philosophy IUSS Center

Epistemology & Mathematics Series

06/04/2023 IUSS, Sala Del Camino, Palazzo Broletto 14.00-16.00 CET

Marco Panza (CNRS, Paris; Chapman University) Epistemic Economy in Mathematics

[abstract]

Much of the philosophical discussion in mathematics concerns the existential scope of axioms, rules, and other sorts of assumptions made in the course of a proof. It seems to me that this discussion lets much of its meaning depend on a traditionally platonist view of mathematical activity, independently of whether one accepts or rejects such a view. Limiting existential assumptions has intrinsic value only if doing so makes it possible to avoid assuming the existence of certain objects whose existence can only be verified on the basis of the consequences of those very assumptions. But if mathematical objects are thought of as stable intellectual contents, then what seems reasonable to limit are the conceptual resources needed to make these contents stable, not their existence (a notion that becomes rather difficult to grasp). I call this kind of parsimony 'epistemic economy'. In my talk I will try to better explain this notion and to justify why it plays an interesting role in the philosophy of mathematics.