TOPOI CFP: “INFERENCES AND PROOFS”

Call for papers

Inferences and proofs: a special issue of TOPOI

Guest edited by Gabriella Crocco and Antonio Piccolomini d’Aragona

Since its birth, logic has been concerned with the study of correct reasonings or, more specifically, of proofs. A proof should have the epistemic power to provide us with justification for the judgment or assertion which it ends with. This power is, from a different point of view, the power to compel one to accept the conclusion of the proof. Which forms of reasoning can be said to have such power? And above all, how can they exert an epistemic power of compulsion? According to Descartes, a correct reasoning is nothing but a chain of valid inferences. The epistemic power of proofs should therefore depend on the epistemic power of valid inferences. The problem then becomes: what is a (valid) inference? And why do valid inferences have an epistemic force? These questions, far from being psychological in nature, rather involve epistemology, logic and mathematics.

TOPOI invites submissions to the special issue "Inferences and proofs", edited by Gabriella Crocco (Aix-Marseille University) and Antonio Piccolomini d’Aragona (Aix-Marseille University, "La Sapienza" University of Rome).

Confirmed invited contributors:
- Cesare Cozzo – "La Sapienza" University of Rome
- Gabriella Crocco – Aix-Marseille University
- Nissim Francez – Technion Israel Institute of Technology
- Per Martin-Löf – Stockholm University
- Dag Prawitz – Stockholm University
- Peter Schroeder-Heister – Tübingen University
- Göran Sundholm – Leyden University
- Luca Tranchini – Tübingen University
- Gabriele Usberti – Siena University

Main areas of interest:
- Dag Prawitz’s proof-theoretic semantics and recent theory of grounds;
- Per Martin-Löf intuitionistic type theory;
- Category theory;
- Contextual approaches to epistemic issues;
- Kurt Gödel’s notion of absolute proof.

Possible topics include:
- the adequate order of explanation that the notions of inference and proof should be formally and conceptually provided with;
- the relevance of epistemic contexts in the description of (valid) inferences;
- the idea that hypothetical proofs should take priority over the categorical ones – and not the other way around;
· a demand of transparency that formal objects of evidence should satisfy;
· the nature of judgments or assertions occurring in inferences, and their “ethic” relevance;
· differences and relationship between valid inferences, proofs and logical consequence;
· axioms, assumptions and dependence relationships in proofs;
· a proof-theoretic treatment of paradoxes;
· identity of proofs;
· Gödel’s ideas about set-theory and absolute proof, also in connection with Georg Kreisel’s well-known distinction between formal and informal rigour, and their relevance for (valid) inferences and epistemic procedures.

SUBMISSION PROCEDURE

Papers must be written in English. Also, they should not exceed 50.000 characters – spaces and references included – and follow Topoi’s formatting guidelines – for them, check [http://www.springer.com/philosophy/journal/11245](http://www.springer.com/philosophy/journal/11245).

All manuscripts will undergo double-blind peer-review. They have to be submitted exclusively through the Online Manuscript Submission System, i.e. the Editorial Manager at [http://www.editorialmanager.com/topo](http://www.editorialmanager.com/topo).

When submitting, ensure you select the appropriate article type – "S.I.: Inferences and proofs (Crocco/Piccolomini)" – from the scroll-down menu.

For further information please contact:
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**Submission deadline: 31 May 2017**