

Workshop "Recent developments in formal theories of truth and other type-free systems"

Date: June 10-12, 2026

Locations:

10th - room D2.08 (Ruyszaal) - Amsterdam University Library, Vendelstraat 2-8, 1012 XX Amsterdam

11th - room 1.01 - University Theatre, Nieuwe Doelenstraat 16, 1012 CP Amsterdam

12th - room 0.12 - Binnengasthuis 2 - BG2, Turfdraagsterpad 15, 1012 XT Amsterdam

Day 1

12:00-13:00 talk 1 Kentaro Fujimoto (Bristol)

13:00-14:30 lunch break (90)

14:30-15:30 talk 2 Simone Picenni & Pablo Rivas-Robledo & Thomas Schindler (Amsterdam)

15:30-16:00 break (30)

16:00-17:00 talk 3 Pietro Brocci (Pisa)

Day 2

12:00-13:00 talk 1 Catrin Campbell-Moore (Bristol)

13:00-14:30 lunch break (90)

14:30-15:30 talk 2 Rasmus Bakken (Oxford)

15:30-16:00 break (30)

16:00-17:00 talk 3 Volker Halbach (Oxford)

18:00 Conference Dinner

Day 3

12:00-13:00 talk 1 Carlo Nicolai (KCL)

13:00-14:30 lunch break (90)

14:30-15:30 talk 2 Camila Gallovich & Camillo Fiore (Buenos Aires)

15:30-16:00 break (30)

16:00-17:00 talk 3 Johannes Stern (Bristol)

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Kentaro Fujimoto

The title and abstract of my talk are the following.

Title: Some formal arguments against deflationism.

Abstract:

I will present some formal arguments against deflationist doctrine that truth is insubstantial and/or logical and discuss their consequences.

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Simone Picenni and Pablo Rivas-Robledo

Title: Can a definition of truth justify a theory of truth? (joint work with Thomas Schindler)

Abstract:

Axiomatic theories of truth dominate the logical study of truth. The great number of different theories on the market raises the question of how to justify choosing one over another. Standard criteria, such as proof-theoretic strength, have not singled out a clear winner. Recently, an alternative approach to axiomatic theories has emerged: defining truth explicitly using sentential quantifiers and deriving axiomatic theories from that definition together with some extra principles regarding when a sentence expresses a proposition. It has been suggested that axiomatic theories can be justified by such higher-order definitions. The works of Wolfgang Künne and

Ian Rumfitt provide prominent examples. This paper critically examines whether higher-order definitions of truth can justify axiomatic theories of truth, using Rumfitt's work as a case study.

Rumfitt claims that one can derive all axioms of PKF (Partial Kripke–Feferman, a formalization

of Kripke's theory of truth in partial logic) from a formalization of Strawson's definition of truth

using sentential quantifiers together with some extra principles regarding when a sentence expresses a proposition. Our paper has three aims. First, we point out some gaps and shortcomings

in Rumfitt's attempted derivation. Second, we propose some ways to fix these issues. Third,

we will assess the epistemic import of such derivations. We argue that such derivations cannot

be used to adjudicate between rival axiomatic theories of truth. Nevertheless, they are valuable

because they organize our knowledge.

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Pietro Brocci

Title: Cyclic proofs of positive disquotational strength

Abstract:

Axiomatic theories of disquotational truth capable of yielding proof-theoretic power have been employed in different philosophical programmes; some aim to employ disquotational truth instrumentally to perform ontological reduction of higher-order quantification to a first-order setting with a truth predicate. Others employ the truth predicate as an epistemic tool to justify new mathematical knowledge starting from a basic core of arithmetic. The former programme has succeeded in performing ontological reductions of highly impredicative theories; the epistemological programme, on the other hand, has limited expressive resources due to its connection with reflection principles and reflective closure of arithmetical theories.

In this talk, we explore a different route for the epistemological programme, focusing on positive disquotational truth as a strong alternative to reflection-based processes. To fully exploit the proof-theoretic power of Positive Disquotation, we frame it in systems where cyclic proofs with the truth predicate are permitted with some restrictions. We prove the soundness of the system with respect to the least fixed-point model and prove the theory to be proof-theoretically on par with impredicative theories such as ID1 KF_μ.

This is joint work with Graham Leigh

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Catrin Campbell-Moore

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Rasmus Bakken

Title: When Are Two Axiomatic Theories of Truth Conceptually Equivalent?

Abstract:

It is commonly taken to be the case that one theory of truth can be given several different axiomatisations that are nonetheless conceptually equivalent. For instance, the choice between two different reasonable Gödel codings should not matter when axiomatising a theory of truth. To make such claims more precise, there has been a search for what formal relation these axiomatic theories of truth should have to be called conceptually equivalent.

Carlo Nicolai has argued that mutual truth-definability is necessary but not sufficient, and that t-equivalence is sufficient. The first aim of this talk is to put some pressure on the necessity of t-equivalence. This will be done by motivating a conjecture that there are two different versions of a Kripke-Feferman theory of truth, only differing in the Gödel code of their truth predicate, that are not t-equivalent. The claim will be motivated by showing that two very natural attempts at showing t-equivalence fail.

After motivating this conjecture, the talk will also look at some new results relevant to conceptual equivalence. Firstly, I will show that t-equivalence collapses into t-synonymy when sufficient induction is available. Secondly, I will classify all relative interpretations of PA with itself satisfying an extended induction principle. This will allow us to sketch how interpretations with extended induction that re-interprets the arithmetical vocabulary can be transformed into interpretations that leave the arithmetical vocabulary alone.

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Volker Halbach

Title: Incompleteness, Reflection, and Implicit Commitment

Abstract:

When we accept a formal system S , we are implicitly committed also to statements partially or fully expressing the soundness of S in the language of S . This claim is a simple version of the Implicit Commitment Thesis (ICT). A paradigmatic example of a statement partially expressing soundness is the arithmetized consistency claim for Peano arithmetic with PA as S . I will try to sharpen ICT. In particular, I will investigate what exactly these additional

statements are, what their relative strengths are, and what supports the claim that we are implicitly committed to them. I will consider less familiar systems as base theory S and present cases where the addition of soundness statements to an arithmetically sound system S leads to an inconsistency. Finally, I will consider the overall plausibility of ICT.

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Carlo Nicolai

Title: Properties, sets and intentionality

Abstract:

I will argue that antifoundation axioms, suitably modified, yield interesting property-theoretic principles, capable of meeting at least three main desiderata of a type-free approach to properties: representing sets as extensional properties, featuring genuine self-instantiation, providing a principled resolution of property-theoretic paradoxes. I will focus on a specific formal incarnation of this general idea, involving a principle of intensional identity.

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Camila Gallovich and Camillo Fiori

Title: Truth, give me strength

Abstract:

One of the most challenging arguments against non-classical logics is that they give rise to weaker theories than classical logic. This concern is especially pressing in mathematics, where classical reasoning is often seen as indispensable. The thought is that, other things being equal, if a non-classical theory is mathematically weaker than the corresponding classical theory, then the latter should be preferred. In this work, we offer two responses to the argument from strength, taking the classical theory Kripke-Feferman (KF) and the non-classical theory Partial Kripke-Feferman (PKF) as our test case. Although both theories aim to axiomatize Kripke's semantic construction for truth over Peano arithmetic, KF is arithmetically stronger than PKF. Our first response to the argument is that comparing KF to PKF requires adopting not only a conception of truth but also a conception of arithmetic. After reviewing various conceptions, we conclude that PKF fares at least as well as KF under most of them. Our second response is based on an argumentative strategy known as classical recapture. PKF can be strengthened by selectively adding safe instances of excluded middle. Together, these responses suggest that, contrary to what is often assumed, the argument from strength does not undermine non-classical logics. (This is a joint work with Lucas Rosenblatt.)

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Johannes Stern