

# Introduction to Quarc: The Quantified Argument Calculus

**ONLINE TALK BY**

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## **INTRODUCTION |**

The Quantified Argument Calculus (Quarc) is a new logic system, developed by [Hanoch Ben-Yami](#) and other philosophers and logicians. Its basic departure from Frege's logic is in its treatment of quantification: quantifiers are not sentential operators but connect to one place predicates to form arguments – quantified arguments – of other predicates. Quarc is closer to natural language in its syntax and the inferences it validates than is the first-order Predicate Calculus, while being at least as strong as the latter.

By now, Quarc has been shown to be sound and complete; to contain and validate Aristotle's logic; it separates quantification from existence, shedding new light on logic's ontological commitments, and lack thereof; it has been extended to modality, invalidating its analogues of the Barcan formulas; three-valued versions of it have been developed, capturing presupposition failure; additional quantifiers have been incorporated in it, such as 'most' and 'more'; several Quarc proof systems have been developed, including sequent calculi, and its metalogical properties have been researched in depth; the image of the Predicate Calculus it contains shows in what sense quantification in the latter is restricted relative to Quarc's; and more. Further research is currently being conducted, and there's much potential in additional directions.

In this meeting, the first of a postgraduate seminar on Quarc, Ben-Yami will introduce Quarc, with a discussion to follow. Although this is the first class in a course, it is self-contained. Knowledge of logic on at least the level of an advanced philosophy introductory course will be assumed.

[The meeting takes place on World Logic Day.](#)

## **HOW TO REGISTER |**

To register and obtain a link to the talk, please write to [Quarc@CEU.edu](mailto:Quarc@CEU.edu) with the subject line 'Registration Quarc WLD'.

