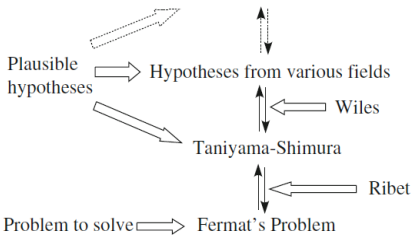
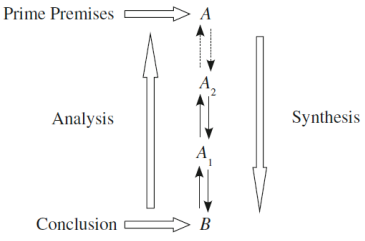
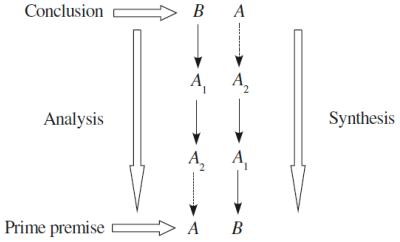
# Analysis, Synthesis and Scientific Discovery





## Carlo Cellucci

*SAPIENZA* UNIVERSITY OF ROME


### Science & Philosophy Colloquia

Room XI
Villa Mirafiori – Via Carlo Fea 2 – Roma
Tuesday 28 November 2017 – 13:30-15:30

open to the public

**organization**
**Emiliano Ippoliti**
FILOSOFIA – SAPIENZA

SAPIENZA
UNIVERSITÀ DI ROMA

DIPARTIMENTO DI FILOSOFIA | DOTTORATO IN FILOSOFIA | SCIENCE & PHILOSOPHY COLLOQUIA

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# Programme

**Tuesday**
**28 November 2017**

13:35-13:45 **Introduction** Emiliano Ippoliti *Filosofa – Sapienza*

13:45-14:45 **Analysis, Synthesis and scientific discovery**
C. Cellucci *Filosofia – Sapienza*

14:45-15:00 **Break**

15:00-15:30 **debate**
chair **Emiliano Ippoliti**

# Description

In my talk I will examine analysis and synthesis both from a conceptual and historical viewpoint. I will discuss several versions of the analytical and synthetic methods and their relation and role in scientific discovery.

**Carlo Cellucci** is Emeritus at Department of Philosophy - *Sapienza* University of Rome. He graduated in philosophy at the State University of Milan in 1964 writing a dissertation entitled 'Ordinali ricorsivi' [Recursive Ordinals], under the supervision of Ludovico Geymonat. He had a fellowship of the CNR National Group for Mathematical Logic at the University of Milan (1964-1966), a NATO-CNR fellowship at Oxford University (1967-1968), and a Royal Society fellowship, again at Oxford University (1968-1969), working on intuitionistic logic and mathematics under the supervision of John N. Crossley and Michael Dummett. He was lecturer in Mathematical Logic at the University of Sussex (1969-1971), lecturer in Logic at the University of Siena (1971-1976), extraordinary professor of Philosophy of Science at the University of Calabria (1976-1978), full professor of Philosophy of science at the University of Siena (1978-1979). He also was lecturer in Mathematical Logic at the University of Rome La Sapienza (1971-1979). Since 1979 he has been full professor of Logic at the University of Rome La Sapienza, where is now emeritus professor. His research work first concerned mathematical logic, especially proof theory, on which he published the book 'Teoria della dimostrazione' [Proof Theory] (1978). At the same time he dealt with philosophy of mathematics, publishing several papers and editing two books, 'La filosofia della matematica' [The Philosophy of Mathematics] (1967), and 'Il paradiso di Cantor' [Cantor's Paradise] (1979). Subsequently he has published two books, 'Le ragioni della logica' [The Reasons of Logic] (1998) and 'Filosofia e matematica' [Philosophy and Mathematics] (2003), where he develops an alternative to the prevailing orthodoxy in logic and in the philosophy of mathematics. More recently he has published a book, 'La filosofia della matematica del Novecento' [Philosophy of Mathematics in the Twentieth Century] (2007) where he presents the main trends in the philosophy of mathematics of the last century, extensively discussing their limitations. He has recently published a new book, 'Perché ancora la filosofia' [Why Still Philosophy] (2008) where he develops an alternative to the prevailing orthodoxy in epistemology. He has been an editor of the series 'Studies in Proof Theory' (Bibliopolis, Napoli) and the series 'Instrumenta Rationis: Sources for the History of Logic in the Modern Age' (CLUEB, Bologna). He has recently published two new books, 'Rethinking Logic: Logic in Relation to Mathematics, Evolution, and Method' (2013) and ‘Rethinking Knowledge. The Heuristic View’ (2017).