



Università
Ca'Foscari
Venezia

PROJECT ACRONYM AND TITLE: REALE – Reassessing Leibniz's conception of number and the infinite

FUNDING PROGRAMME: H2020 Excellence Science – Marie Skłodowska-Curie Individual Fellowships

CALL: H2020-MSCA-IF-2019

SCIENTIFIC FIELDS: SOC - Social Sciences and Humanities

HOST DEPARTMENT: Department of Philosophy and Cultural Heritage

SCIENTIFIC RESPONSIBLE: Prof. Luigi PERISSINOTTO

FELLOW: Filippo Costantini

FINANCIAL DATA:

| Project total costs | Overall funding assigned to UNIVE |
|---------------------|-----------------------------------|
| € 237768,00 | € 237768,00 |

ABSTRACT:

The overall aim of the project is to investigate a neglected, though highly significant, topic in Leibniz's thought: his general conception of number in light of his mereological theory. Special attention will be given to how this mereological background affects Leibniz's conception of the infinite, and in particular his denial of the existence of an infinite number. In this way, the project will reshape the standard view according to which Leibniz's rejection of infinite number is simply based on a faulty argument. On the contrary, the project's ambition is to bring out – from Leibniz's reflection on this topic – a (mereological) foundational theory for mathematics that can be seen as an alternative with regard to the standard set theoretical one. This topic has the potential to bridge the gulf now existing between an important mereological foundation of mathematics, as the Leibnizian' one, with contemporary approaches – made in the 20th century by Lesniewski and his school on one side, and David Lewis's Parts of Classes, on the other side – which exploit mereology to provide a less ontologically committed foundations for mathematics than set theory. The project can thus fill a gap in Leibniz's scholarship and, at the same time, shed light on these contemporary attempts, and possibly revive some of their key aspects.

| Planned Start date | Planned End date |
|------------------------------|--------------------------------|
| 1 st January 2021 | 31 st December 2023 |

PARTNERSHIP:

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|-----------|---------------------------------------|---------------|--------------------|
| 1. | Università Ca' Foscari Venezia | Italy | Coordinator |
| 2. | McMaster University | Canada | Partner |