Europeean Materials Modelling Ontology

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European Materials Modelling Counsil (EMMC)

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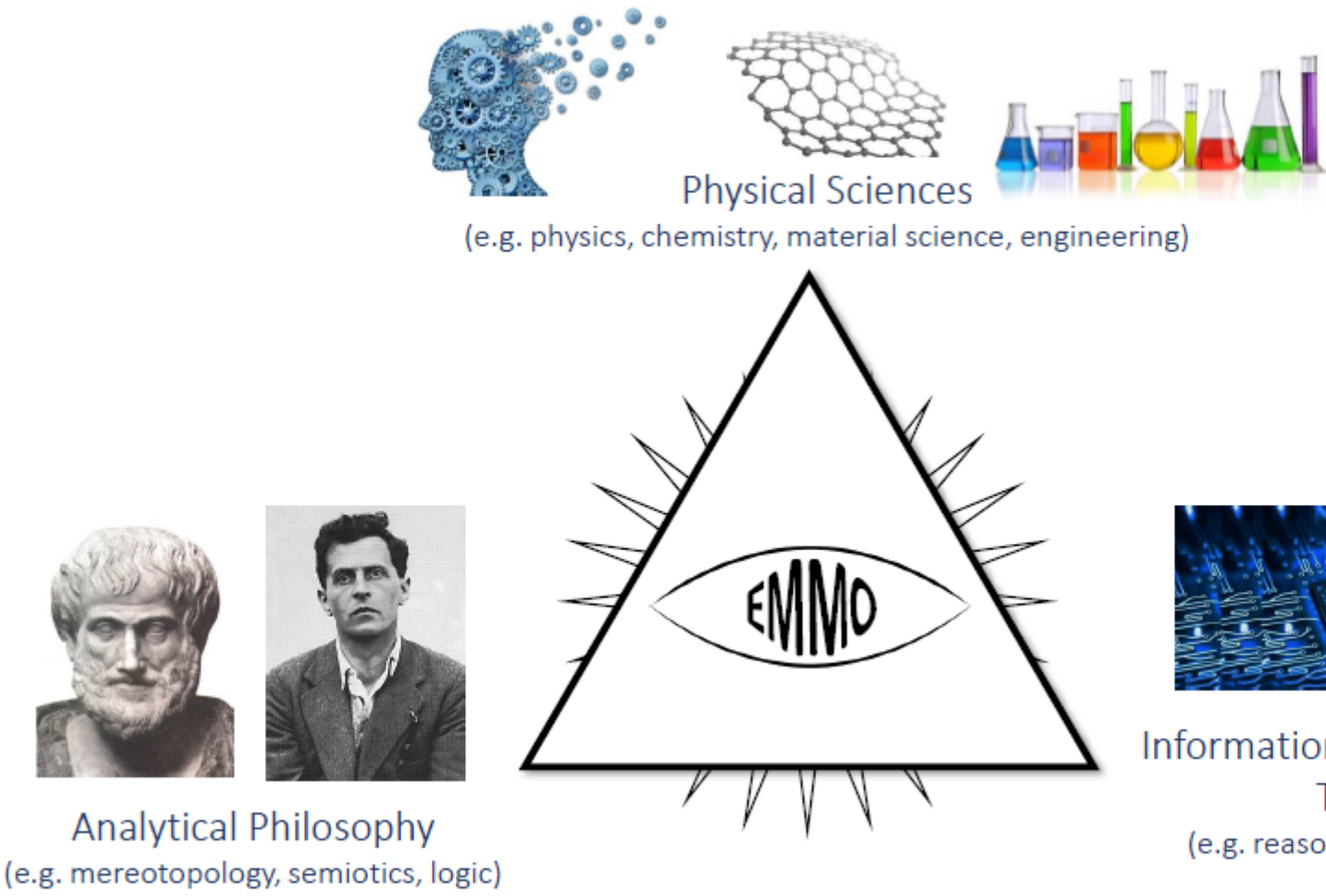

Abstract

EMMO is an ontology that is created by the Europeean Materials Modelling Council (EMMC) to provide a formal way to describe the fundamental concepts of physics, chemistry and materials science. EMMO is designed to pave the road for semantic interoperability providing a generic common ground for describing materials, models and data that can be adapted by all domains.

It is a representational framework of predefined classes and axioms (ontology) provided by experts (EMMC) that enables end users (industry, research, academy) to represent real life physical entities (materials, devices), models and properties using ontological signs (individuals) in a standard way to facilitate interactions and exchanges (data, software, knowledge) between all involved material modelling and characterization communities and stakeholders.

Keywords: EMMO, materials science, modelling, characterisation, materials, ontology

Authors:

Emanuele Ghedini, University of Bologne

Gerhard Goldbeck, Goldbeck Consulting

Adham Hashibon, Fraunhofer IWM

Georg Schmitz, ACCESS

Jesper Friis, SINTEF

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