

# Ontology Categories in COLORE

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Meta-Ontology for Ontology Categories

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# Challenge

- What is a particular ontology about?
- How do we describe the content of an ontology?

# Approach

Categorize ontologies by

- logical properties
- genericity – mathematical, generic, midlevel, domain

# Logical Categorization

Within COLORE, we classify ontologies with respect to how they are merged to form new ones

- reducible
- weakly reducible
- decomposable
- nondecomposable

# Categorization by Genericity

- Many ontologies in COLORE are axiomatizations of classes of mathematical structures which are used in the verification of other ontologies
- There are also generic ontologies for
  - ▶ time
  - ▶ process
  - ▶ space
  - ▶ shape
  - ▶ geometry
- Midlevel ontologies are the result of merging generic ontologies

# Next Steps

## How do domain ontologies fit into this framework?

- GoodRelations
- FIBO
- SCRIBE
- Foundational Model of Anatomy
- BioPAX
- units of measure
- addresses
- products
- computer vision
- enterprise modelling