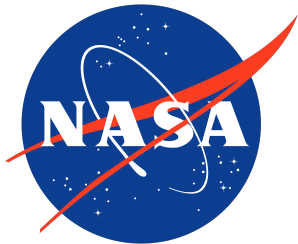


# Lorentzian Geometry and Topological Electromagnetism

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Thanks and funding



# Section 1

## **Introduction**

# Outline

- 1 Intro Lorentzian geometry
- 2 de Rham (Co)homology
- 3 Topological electromagnetism
- 4 Poincaré group  $A(1, 3)$  and its Lie algebra  $\mathfrak{a}(1, 3)$ .

## Section 2

# Lorentzian Geometry

## Section 3

### de Rham (Co)homology

## Section 4

# Poincaré Group

symmetries of lorentz space.