

**About some future directions  
in fundamental physics  
(organised by a group of  
former students of RB)**

**Report of Contributions**

Contribution ID: 2

Type: **not specified**

# Hints of new physics from the topological structure of the vacuum of the Standard Model and GR

*Saturday, 9 November 2024 10:15 (45 minutes)*

**Presenter:** DVALI, Gia (Munich U., ASC and Munich, Max Planck Inst.)

Contribution ID: 3

Type: **not specified**

## **Axions beyond the QCD axion**

*Saturday, 9 November 2024 16:00 (45 minutes)*

**Presenter:** GORI, Stefania (UC, Santa Cruz (main))

Contribution ID: 4

Type: **not specified**

## **Microcausality without Lorentz invariance**

*Saturday, 9 November 2024 09:30 (45 minutes)*

**Presenter:** NICOLIS, Alberto (Columbia U.)

Contribution ID: 5

Type: **not specified**

# The Strange Case of Continuous-Spin Particles

*Saturday, 9 November 2024 12:15 (45 minutes)*

**Presenter:** BELLAZZINI, Brando (IPhT, Saclay)

Contribution ID: 6

Type: **not specified**

# **From Higgsless models to Transformers: Breaking the cut-offs in Physics and Machine Learning**

*Saturday, 9 November 2024 15:15 (45 minutes)*

**Presenter:** TORRE, Riccardo (INFN, Genoa)

Contribution ID: 7

Type: **not specified**

## **Goldstones, vectors and positivity**

*Saturday, 9 November 2024 11:30 (45 minutes)*

**Presenter:** VICHI, Alessandro (Pisa U. and INFN)

Contribution ID: 8

Type: **not specified**

## Positivity bounds on EM properties of media

*Saturday, 9 November 2024 17:15 (45 minutes)*

**Presenter:** CREMINELLI, Paolo (ICTP)

Contribution ID: 9

Type: **not specified**

## **Tetraquarks: Successes & Mysteries**

*Saturday, 9 November 2024 14:45 (30 minutes)*

**Presenter:** MAIANI, Luciano (Rome U. & INFN & CERN)