

When the M meets the P

Report of Contributions

Contribution ID: 2

Type: **not specified**

Scientific exchanges between Einstein, Weyl and Cartan - The birth of Gauge Theory

Tuesday, 3 May 2022 14:00 (1 hour)

TBA

Presenter: Prof. BOULANGER, Nicolas (UMONS)

Session Classification: IRMP

Contribution ID: 5

Type: **not specified**

Nilpotent quandles

Tuesday, 3 May 2022 16:30 (7 minutes)

Presenter: DARNÉ , Jacques

Session Classification: IRMP: gong session

Contribution ID: 26

Type: **not specified**

Distal and proximal causes of biodiversity loss

Tuesday, 3 May 2022 15:00 (1 hour)

We no longer have any scientific doubt about the importance of the biodiversity crisis, and we are beginning to understand the consequences it can have for the global functioning of the earth's ecosystem and for the development of humanity.

To manage this situation, we need to identify the causes. The proximal causes are well known : disappearance and fragmentation of natural habitats, simplification of ecosystems, intensive agriculture, pollution, invasive species, climate change. It should therefore be easy to find solutions to these various aspects and yet we are failing.

One of the reasons lies in the fact that these proximal causes are closely dependent on distal causes that push us to constantly overexploit natural resources. The constant search for financial profits is the basis of the economic system and conditions our well-being. We are therefore bound by a system that we can only modify at the margin at the risk of a major dysfunction of society. To ask the question of biodiversity preservation is also to ask the question of the means of this change of system. One of the tracks is the reinjection of benevolence in the economic relations so that the resolution of needs takes priority over the realization of profit. Such an upheaval requires the establishment of a genuine participatory and egalitarian democracy that defines the needs in relation to the limits of the planet. This short presentation aims to place the very functioning of our societies at the heart of the debate.

Presenter: Prof. HANCE, Thierry (UCLouvain)

Session Classification: IRMP

Contribution ID: 27

Type: **not specified**

Machine Learning in High-Energy Physics

Tuesday, 3 May 2022 16:37 (7 minutes)

Presenter: WINTERHALDER, Ramon (CP3)

Session Classification: IRMP: gong session

Contribution ID: 28

Type: **not specified**

Cosmic muon radiography, with the MURAVES experiment and a custom-made portable telescope

Tuesday, 3 May 2022 16:44 (7 minutes)

Presenter: BASNET, Samip (UCL - CP3)

Session Classification: IRMP: gong session

Contribution ID: 29

Type: **not specified**

Non-additive left derived functors

Tuesday, 3 May 2022 16:51 (7 minutes)

Presenter: CULOT, Maxime

Session Classification: IRMP: gong session

Contribution ID: **30**

Type: **not specified**

Enumerating Standard Model Effective Field Theory with Group Theory Technique

Tuesday, 3 May 2022 16:58 (7 minutes)

Presenter: LI, Haolin

Session Classification: IRMP: gong session