

ORIGIN-Mexico : an Art-Science exhibit for the LHCP19 conference

Claire Adam-Bourdarios
On behalf of the organisation team

+ Introducing the ORIGIN network

What ?



ORIGIN

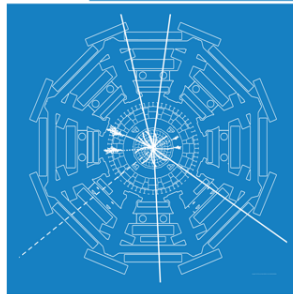
ORIGIN is a network founded by worldwide high energy physics and astrophysics collaborations studying the evolution of the universe.

Origin is a theme that unites people: philosophers, artists, scientists address it with different perspectives.

By creating events where scientists and artists join forces to demystify concepts and practises, we aim to engage the public and inspire awe, creativity and critical thinking.



@OriginPhysics
<http://cern.ch/originnetwork>



Who?

- Created in January 2018
- 1 or 2 co-coordinators per participating collaboration



- Open network: actors keep their freedom and identity

Why ?

How ?

+ WHY ? The power of worldwide collaborations

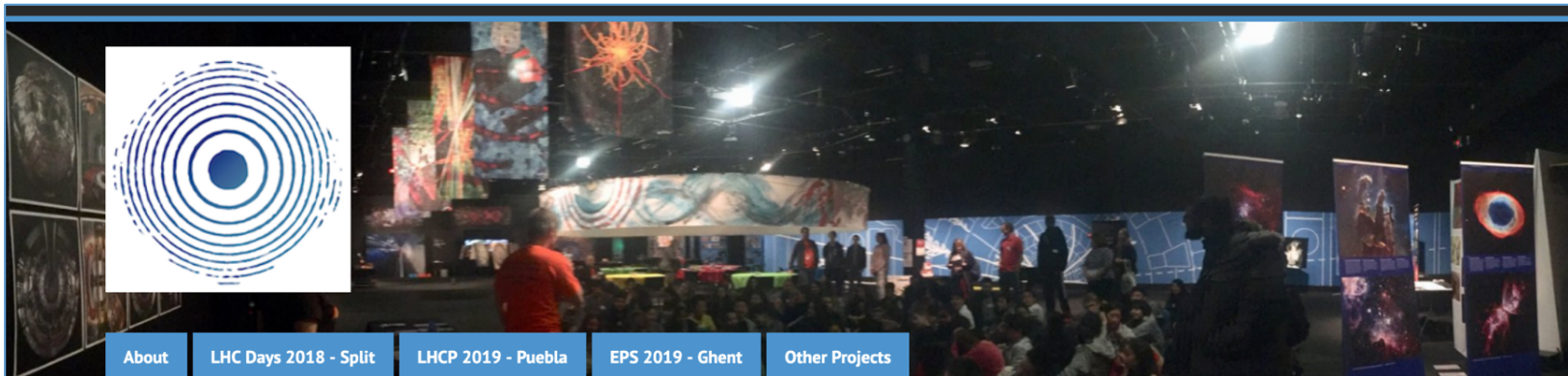
The HEP Art-Science landscape evolved in the last few years, thanks to a growing number of initiatives to

- Attract established artists to major labs (e.g. CERN residencies, but not only)
- Introduce arts in STEM (e.g. Cultural Collisions)
- Co-organize events with museums & art schools (e.g. KASK this week)

It is maybe time to :

- Share expertise & networks
- Increase the visibility of colleagues doing excellent work in the shade
- Use and highlight the power of diversity in our worldwide collaborations





The ORIGIN network



LHCP 2019 - May 20/25 - Puebla, Mexico



What is the nature of the universe ? What is it made of ? How can Art and Science infer and discuss its origin and evolution ?

Over the full [LHCP 2019 conference](#) duration an exhibit addressed these questions and introduced for the first time in Mexico the ORIGIN Art-Science partnerships concept. It was open to all interested, free of charge, and was built as inspiring frame for informal interactions between the public, professional artists & scientists, students & schools.

The exhibit content was prepared through interactions between BUAP & CERN scientists (who introduced the LHC goals and experimental program), ARPA art students & teachers (who curated an art competition) and professional artists. Mexican scientists brought detector pieces to explain students how HEP research is performed in their institutes. LHC and detector photos illustrated for the Puebla public the context and objective of the LHCP conference, taking place "next door".

Video: a flavour of the exhibit & competition prize ceremony

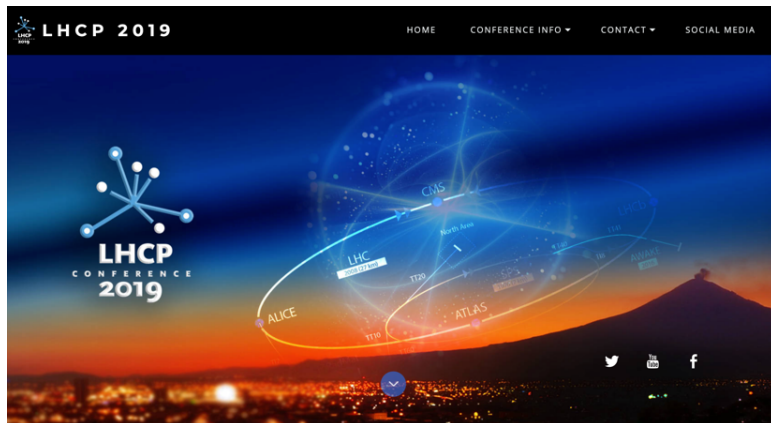
Images: [#origin_puebla](#)

- ORIGIN PUEBLA
- [Overview](#)
- [Event: Art-Science exhibit](#)
- [Co-organizer: BUAP](#)
- [Co-organizer: BUAP-ARPA](#)
- [Co-organizer: ATLAS in a Suitcase](#)
- [Partners: LHCP 2019 Conference](#)
- [Partners: Mexican institutes @CERN](#)
- [Partners: ALICE Virtual Visits](#)
- [Resources: ORIGIN physics links](#)
- [Resources: CERN teachers programme](#)
- [Resources: Cevate2ve](#)
- [News: Poblaterias](#)
- [News: 35mm puebla](#)
- [News: Sala de Prensa FCCom BUAP](#)

- #### SCIENTIFIC PARTNERS
- [ALICE collaboration](#)
 - [ATLAS collaboration](#)
 - [CMS collaboration](#)
 - [IceCube collaboration](#)
 - [LHCb collaboration](#)
 - [LIGO collaboration](#)
 - [Muographix collaboration](#)
 - [VIRGO collaboration](#)

Core

Project specific



Example:
The LHCP 2019 event

Conference organizers
= BUAP-ALICE group

Art competition project
= BUAP-ARPA

All remote interactions
by, for & with Mexican
scientists, students,
artists, teachers, public.

Budget for material
transport: zero 😊

Preparation: 10 months

Organisation & contacts

Please use the email address origin-mexico@cern.ch to reach the full team;

- **Arely Cortes Gonzalez** (Students training & programme - CERN ATLAS fellow)
- **Claire Adam** (ORIGIN co-coordinator - CNRS/LAPP ATLAS group)
- **Diana Exzacarias Montalvo** (Mexican teachers programme - TecNM Instituto Tecnológico de Orizaba)
- **Irais Bautista Guzman** (LHCP conference chair - BUAP ALICE group)
- **Jesus Pérez Acosta** (Art competition curator - ARPA Coordinador del Colegio de Artes Plásticas)
- **Lorenzo Diaz Cruz** (Students mentor - BUAP theory group)
- **Luis Flores Castillo** (Mexican teachers programme - Chinese University of Hong-Kong ATLAS group)
- **Nadia Leal** (Students crew coordinator - Student in BUAP-FCFM)
- **Yazmin Alejandra Pineda Tellez** (Exhibit curator - ARPA Colegio de Artes Plásticas)

This event could not have been setup without the kind support of: BUAP, members of the LHCP conference committees, CERN ECO group, and the 4 ALICE, ATLAS, CMS, LHCb collaborations.

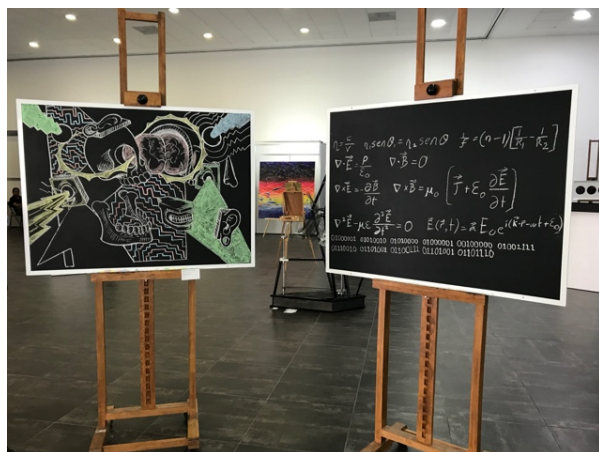
Example: The LHCP 2019 event



--- Art ---

ARPA students “competition”

- 10 days of intensive interactions through Vidyo
- CMS & ALICE virtual visits
- Visit of the local institute
- 1 month of brainstorming and pieces production
- Price ceremony during de conference break



Example: The LHCP 2019 event

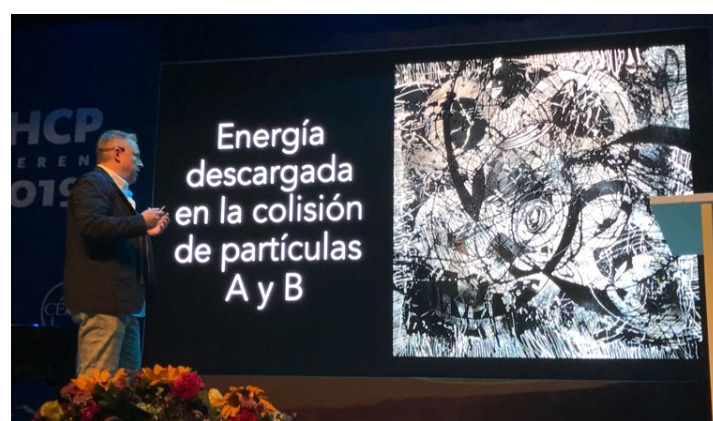
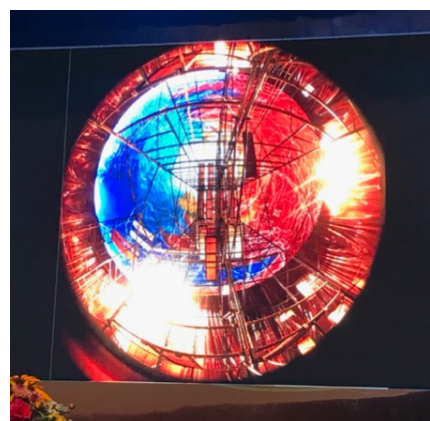
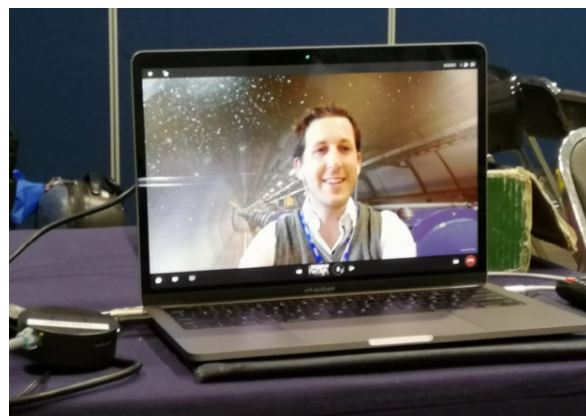
--- Science ---

Mexican Institutes & the LHC



- **GOAL:** highlight Mexican contributions towards their public & officials
- **A must:** the 4 canonical "LHC selfie spots"
- **For the rest:** adapt to last minute unforeseen issues & be creative !

Example: The LHCP 2019 event



--- Education --- Students & Teachers

- Training conference staff students
 - One day workshop with Mexican teachers who participated to the CERN teacher's program
 - Lecture by Mexican artist
- [No schools for that one]



Lesson 1

Flexibility & improvisation are part of the game
Understanding what others bring takes months

<https://originnetwork.web.cern.ch/content/origin-south-east-europe>



<https://originnetwork.web.cern.ch/content/lhcb-2019-mexico>

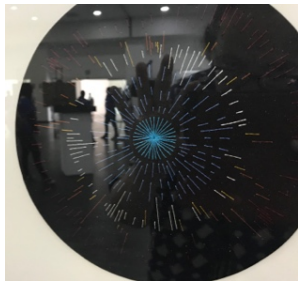


+ Lesson 2

21st century themes & wonders will inevitably come into the game

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- Higgs, Higgs, of course ...
- Collisions, data & event visualization of course ...
- But got to identity, curiosity, stereotypes, roots, creation



James Beacham
@jbeacham

Following

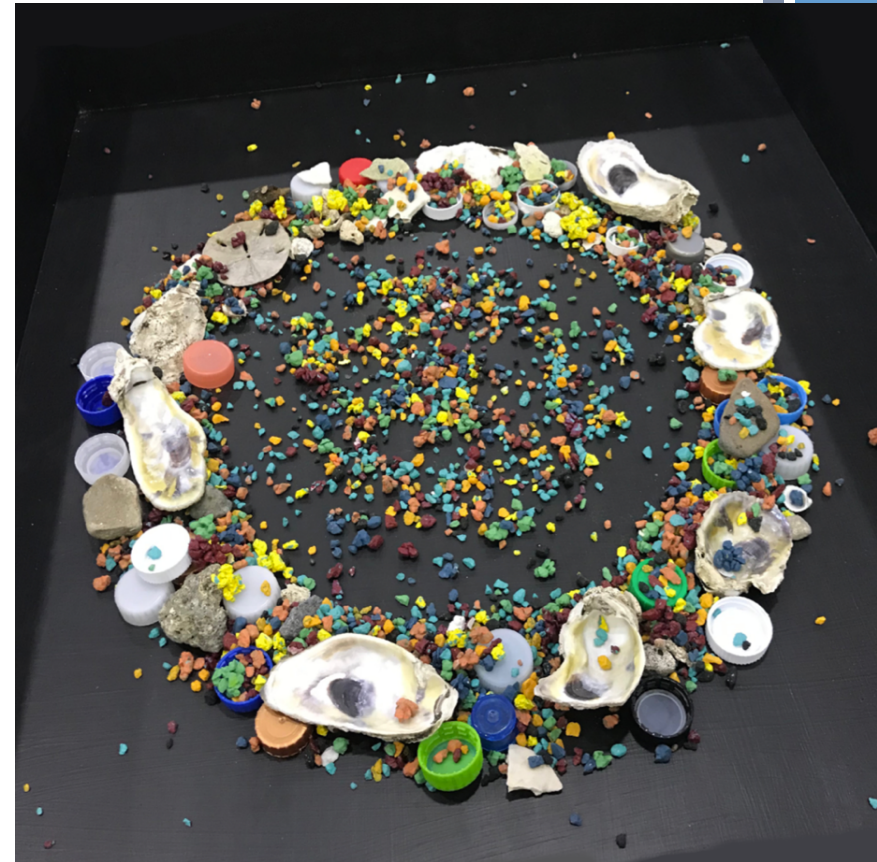
Belgium, tonight, Friday! I'm giving a talk at a special event at KASK @schoolofartsgnt, in conjunction w/a slideshow from artist Liam Gillick. We'll be exploring prediction, estimation, simulation, uncertainty, imagination, & the death of the universe.
harbinger.schoolofarts.be/first-signs

Going short:
prediction as debt
& data tracing
maps to the future

FRIDAY 07.06. - 7 pm

- Liam Gillick
New York based artist, pioneering a distillation with data relations
- James Beacham
The official mediator of CERN with the ATLAS experiment and LHCmain
- Mediation by Jorits Aerts, Agnes CLEA, VUB

Partners



“Excitar al Vacío”, by Maria José Negrete



Lesson 3

Is the community ready ?

- + Discover unexpected support and interest from colleagues
- Art projects do not fit in the classical approval & planning schemes
- + Forces scientists to revisit fundamentals and the implication of their research
- Need to avoid pitfalls such as definition of art and "good artists"
- ? Move from illustration to open-ended inter-disciplinary research ?



"Looking outward", by Yael Ochoa

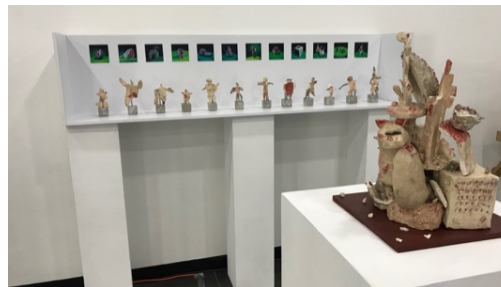
Conclusion(s)

Long live ORIGIN !

- Building up on the very solid art@CMS foundations
- Integrating different individual approaches and collaborations cultures.
- The longest & most exciting part of the preparation is to learn to work together

Art & HEP

- Art-science is trendy and beneficial to "reach-out" very different publics.
- HEP is ramping up. But are we ready for a genuine **"stereotype collider"** ?





Addendum: credits

+ The scientists team



- Irais Bautista Guzman (LHCP Conference chair – BUAP Alice group)
- Luis Flores Castillo (Artist mentor – Hong Kong ATLAS group)
- Claire Adam-Bourdarios (ORIGIN co-coordinator for ATLAS)
- Arely Cortes Gonzalez (Students training – CERN ATLAS fellow)
- Lorenzo Diaz Cruz (Art students host in BUAP – Theory group)

+ The artists team



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- Jesus Pérez Acosta (Art competition curator – ARPA)
- Yasmin Alejandra Pineda Tellez (Exhibit curator – ARPA)
- Pedro Trueba (Guest artist)
- The 18 art pieces authors !



+ The educators team



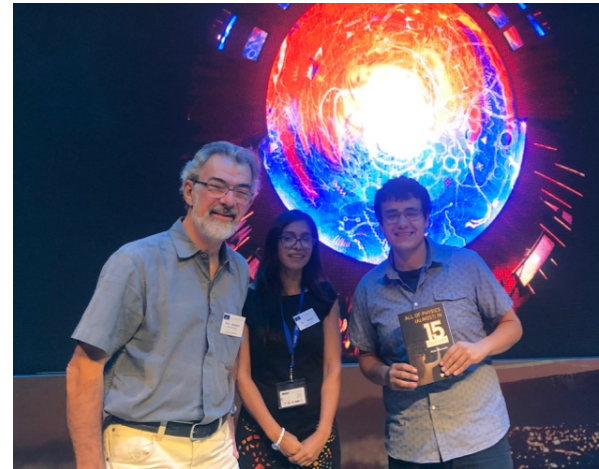
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- Diana Exzacarias Montalvo (Teachers coordinator – TecNM)
- Nadia Leal (Students crew coordinator – BUAP)
- Remote connections:
 - CMS and ALICE Virtual Visits teams
 - Arturos Sanchez Pineda (Open data)
 - Jeff Wiener (CERN teacher's program)



+ Many thanks to

- LHCP chairs, for their early trust and strong engagement
- The ATLAS management, for embarking into the ORIGIN adventure
- ORIGIN co-coordinators, for stimulating push & discussions
- Riccardo Maria Bianchi, for his design and constant support
- LOG group @CERN, for their poems and more



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