

Workshop Perspectives 10

Rapport sur les contributions

ID de Contribution: **16**

Type: **Non spécifié**

Ateliers en demi-groupes

ID de Contribution: 48

Type: **Non spécifié**

D2i2 association

vendredi 16 mai 2025 10:30 (15 minutes)

The D2I2 association (which stands for Doctorants et Docteurs des 2 Infinis) is an association mainly based in the IJCLab and the CEA. However, it also manages all the (PhD) students working for the IN2P3 part of the CNRS in Ile-de-France. Its main objective is to foster a welcoming environment and a natural network between students starting their research careers.

To this end, monthly informal bar meetings are organised in Paris between people from different laboratories to improve relations between different organisations. An annual workshop (Perspective) is also organised to present the different career paths that can be chosen after the PhD.

Classification de Session: D2I2 presentation

ID de Contribution: 54

Type: **Non spécifié**

Pierre Fleury

vendredi 16 mai 2025 10:45 (1h 15m)

Pierre Fleury is a cosmologist, specialised in the theory of gravitational lensing. He defended his PhD in 2015 in Paris and is now a CNRS researcher in Montpellier after 3 successive postdocs in Cape Town, Geneva and Madrid. His research activity has always been accompanied with various forms of public outreach: conferences; translations (Cosmology's Century and the Manga Guide to Relativity); co-creation and acting in a theatre play (L'Horizon des Événements); conceptualisation of an outreach app for lensing (The Hunt for Dark Matter); and interventions in high schools.

Classification de Session: Round Table: Scientific outreach

ID de Contribution: 55

Type: **Non spécifié**

Elodie Chabrol

vendredi 16 mai 2025 10:45 (1h 15m)

Elodie obtained a PhD in Neurogenetics in Paris and while pursuing research as a postdoc at UCL, London she got involved in the creation of the Pint of Science festival in 2013.

She created the French branch in 2014 and after years of working in research and Pint of Science simultaneously, she decided to become a full-time science communicator. She is now the international & france director for Pint of Science and is also involved in various science communication projects as a freelancer.

She is passionate about helping scientists share their love of science with the public. Her mission is to make science accessible to everyone, everywhere and show the human side of it.

Classification de Session: Round Table: Scientific outreach

ID de Contribution: 57

Type: **Non spécifié**

Sullivan Marafico

vendredi 16 mai 2025 15:30 (1h 15m)

Sullivan Marafico is a Research & Development Engineer at the Centre Antoine Lacassagne, a cancer treatment center specializing in protontherapy.

After completing a PhD in high-energy astrophysics (2022) and a brief postdoctoral position, he joined a start-up. However, the company's values did not align with his own, leading him to leave the position shortly thereafter. He then explored various paths, including organic farming, and was eventually accepted into the CAPES in mathematics. He declined the opportunity when he was offered a position at the Centre Antoine Lacassagne, which was seeking a research engineer to support and enhance its proton therapy clinical & research line.

His current role is twofold:

- Maintenance –He ensures the operational continuity of a 65 MeV isochronous cyclotron, critical for delivering consistent proton therapy treatments.
- Research & Development –He actively proposes and develops innovative solutions to improve both clinical practices and research activities.

Sullivan collaborates with researchers from across Europe who conduct experiments at the center, working closely with them to develop innovative particle detectors.

Classification de Session: Round table: Public research

ID de Contribution: 58

Type: **Non spécifié**

Federica Bradascio

vendredi 16 mai 2025 15:30 (1h 15m)

Federica Bradascio is a physicist specializing in astroparticle physics, with a focus on multi-messenger and high-energy gamma-ray astronomy. After earning a degree in particle physics from the University of Pisa, Italy, she defended her PhD on neutrino astronomy in 2021 at Humboldt University of Berlin. She then worked for three years as a postdoctoral researcher at IRFU-CEA Paris-Saclay before joining Université Paris-Saclay in 2023 as maîtresse de conférences, based at the laboratoire de physique des deux infinis Irène Joliot-Curie (IJCLab). She is currently involved in the H.E.S.S. and CTAO collaborations, contributing both to the search for astrophysical sources of high-energy particles through coordinated multi-messenger observations and to the development of CTAO cameras.

Classification de Session: Round table: Public research

ID de Contribution: 59

Type: **Non spécifié**

Mathieu de Naurois

vendredi 16 mai 2025 15:30 (1h 15m)

Mathieu de Naurois is a research director at the CNRS and a professor at the École Polytechnique, specializing in very high-energy gamma-ray astronomy. This very recent branch of gamma-ray astronomy involves observing, with extremely large and fast telescopes, the faint and brief luminous trace (known as “Cherenkov” emission) left in the atmosphere by the cascades of particles generated when a very high-energy gamma ray interacts with a nucleus in the upper atmosphere.

His activities have focused on the startup and operation of the H.E.S.S. network of Atmospheric Cherenkov Telescopes, located in Namibia and operated by an international collaboration of nearly 200 researchers. He has contributed to the detection and interpretation of gamma-ray emissions from numerous celestial objects, such as binary systems, starburst galaxies, and supernova remnants. He led the H.E.S.S. collaboration from 2016 to 2019 and continues to serve as its deputy director. He is also a member of the Cherenkov Telescope Array (CTA) collaboration which will succeed H.E.S.S. He was recently elected vice-chair of the CTAO council. In 2017, he received the CNRS Silver Medal for his contributions to gamma-ray astronomy.

Classification de Session: Round table: Public research

ID de Contribution: 60

Type: **Non spécifié**

Dirk Zerwas

vendredi 16 mai 2025 15:30 (1h 15m)

After a Master degree in Heidelberg in a detector development collaboration, Dirk Zerwas did a PhD at Paris-Sud. From 1998 to 2023 he worked at the Laboratoire de l'Accélérateur Linéaire (LAL), now Laboratoire de Physique des Deux Infinis Irène Joliot-Curie (IJCLab). He was coordinator of the IRN (International Research Network) Terascale. Since 2023 he is Director of the CNRS Helmholtz Dark Matter Lab (DMLab), an international research lab of the CNRS, DESY, KIT and GSI in Hamburg (Germany). He has worked on ALEPH (LEP), ATLAS (LHC) and is member of the DRD6 collaboration (calorimetry). His other interests are phenomenological studies to interpret collider data and cosmological measurements in a common framework to derive constraints on supersymmetric models as well as the calculation of supersymmetric spectra (SuSpect3). The last three years he co-coordinated the ECFA working group on Physics Analysis Tools for the future Higgs/Top/Electroweak Factory.

Links:

- <https://dmlab.in2p3.fr/>
- <https://www.ijclab.in2p3.fr/>
- <http://terascale.in2p3.fr/>
- <https://gitlab.in2p3.fr/ecfa-study/ECFA-HiggsTopEW-Factories>

Classification de Session: Round table: Public research

ID de Contribution: 61

Type: **Non spécifié**

Diane Martraire

samedi 17 mai 2025 09:30 (1h 15m)

After completing her PhD in Astroparticle Physics at IPNO (now IJCLab) in 2014, Diane spent four years conducting research in China and Italy.

Curious about what lay beyond academia, she explored the private sector - a journey that took her from Data Scientist at ArianeGroup to Programme Manager at Safran and Thales.

Today, she is Engineering Manager at Leboncoin, a leading French digital marketplace, where she leads a cross-functional technical team composed of developers (iOS, Android, Web, Backend).

An example of how a strong scientific background can open unexpected and exciting doors - across a wide range of sectors, roles and environments.

Classification de Session: Round table: Research and development, private sector

ID de Contribution: 62

Type: **Non spécifié**

Vsevolod Yeroshenko

samedi 17 mai 2025 09:30 (1h 15m)

Vsevolod received his PhD in Particle Physics from IJCLab in 2024, where his research focused on the development and operation of particle detectors, as well as data analysis within the LHCb experiment at CERN. With a strong interest in detector technologies, he became particularly passionate about their real-world applications beyond fundamental research.

He currently works as an Application Engineer at Weeroc, a spin-off start-up from the OMEGA academic laboratory. The company specializes in integrated circuit design for detector signal read-out, with expertise in embedded systems and software development. Vsevolod contributes to the R&D process by bringing a physicist's perspective to the development, testing, analysis, and presentation of products tailored for diverse fields such as medical imaging, nuclear energy, space industry, climate science, high-energy physics and other.

Classification de Session: Round table: Research and development, private sector

ID de Contribution: 63

Type: **Non spécifié**

Thomas Dumaire

samedi 17 mai 2025 09:30 (1h 15m)

Thomas holds a master's degree in Chemical Engineering of the Sorbonne University and a PhD from Delft University of Technology (the Netherlands) entitled "Advances in the Chemistry of Molten Salt Reactors"(2024). This thesis was founded by the Euratom program (SAMOSAFAER project) and the Nuclear Research and Consultancy Group (NRG). His research focused on actinides salts chemistry, their thermodynamics properties and fission products behaviour.

He also had the opportunity to be guest researcher at the Joint Research Centre of Karlsruhe (Germany) - European Commission, for two years, to develop his expertise in the synthesis of actinide salts and experimental work with fissile materials.

He has joined the startup Stellaria, which aims to develop a new type of Molten Salt breeder Reactor over the next decade. He leads research and development on molten salt synthesis, thermodynamics and fission product chemistry.

Classification de Session: Round table: Research and development, private sector

ID de Contribution: 64

Type: **Non spécifié**

Luc Noizette

samedi 17 mai 2025 09:30 (1h 15m)

Luc received his PhD in embedded electronics for the aerospace sector from the university of Grenoble in October 2024. His research work, carried out part-time at an ArianeGroup subsidiary, focuses on the hardening of digital components integrated into onboard aerospace systems in the face of severe radiative environments.

During his thesis, Luc had the opportunity to visit several specialized ESA and NASA test facilities around the world, to reproduce the effect of radiation on electronic components in an accelerated way.

Today, he works in R&T at Nuclétudes, an ArianeGroup subsidiary located near the Saclay plateau, as a radiation engineer. His daily work is at the intersection of the two infinities, as he characterizes the way in which radiation-matter interactions in the infinitely small can disrupt the operation of probes and satellites used to study the infinitely large in space.

Classification de Session: Round table: Research and development, private sector

ID de Contribution: 65

Type: **Non spécifié**

Vincent Lemaire

samedi 17 mai 2025 11:15 (1h 15m)

Classification de Session: Round Table: Education - Teaching

ID de Contribution: 66

Type: **Non spécifié**

Nicolas Leroy

vendredi 16 mai 2025 16:45 (1 heure)

Useful links

- GALAXIE for “enseignants-chercheurs” :
<https://www.galaxie.enseignementsup-recherche.gouv.fr/ensup/candidats.html>
- “concours” researchers :
<http://www.dgdr.cnrs.fr/drhchercheurs/concoursch/default-fr.htm>
- section 01 website for information :
<https://section01.in2p3.fr/index.html>
- “concours” engineers :
<http://www.dgdr.cnrs.fr/drhita/concoursita/default.htm>

Nicolas Leroy has been a researcher at CNRS since 2004 at Laboratoire de l’accélérateur linéaire (LAL) and now at laboratoire de physique des deux infinis Irène Joliot-Curie (IJCLab). He works on the search for gravitational waves with the Virgo experiment. He took part in many competition/interview juries : CNRS researchers (member of “section 01” between 2012 and 2016), “maitre de conférences” (Sorbonne Université, UGA, Paris-Sud) and research engineers at CNRS.

Classification de Session: CNRS interviews : Backstages

ID de Contribution: 67

Type: **Non spécifié**

Jonathan Biteau

samedi 17 mai 2025 11:15 (1h 15m)

Jonathan Biteau is Maître de conférences at the Paris-Saclay University since 2015. He teaches (astro)physics from L1 to M2, in particular within the MSc program Nuclei, Particles, Astroparticles and Cosmology (NPAC), which he co-directs. His research within the Auger and CTAO collaborations (+ HESS and VERITAS during his PhD and postdoc years) focuses on extragalactic astrophysics and cosmology, as well as instrumentation for astroparticle observatories.

Classification de Session: Round Table: Education - Teaching

ID de Contribution: 68

Type: **Non spécifié**

Raphaël Granier de Cassagnac

vendredi 16 mai 2025 10:45 (1h 15m)

Raphael is both a particle physics researcher and a video-game creator. His debut game, Exographer[1], was released last fall on Steam (PC and Mac), Switch, PS5 and XBOX. The game invites players on a journey through the discovery of fundamental particles, set in a fantasized world inspired by massive experiments imagined by iconic figures such as Curie or Higgs. As a researcher, Raphael studies the quark-gluon plasma with the CMS experiment, and works from the Laboratoire Leprince-Ringuet of École polytechnique. There, he created an academic chair to study the links between Science and Video games, under the patronage of Ubisoft. He then funded the Sci-FunGames studio to release Exographer and make other games. His motto is: Science for all, Fun above all.

[1] Exographer on Steam : <https://store.steampowered.com/app/2834320/Exographer/>

Classification de Session: Round Table: Scientific outreach

ID de Contribution: 69

Type: **Non spécifié**

Jean-Baptiste Bosson

vendredi 16 mai 2025 14:00 (1 heure)

Jean-Baptiste is a freelance professional coach. He both works with companies (managers support, career coaching, team cohesion) and young private individuals (search for meaning in life and work, implementation of life and professional projects).

After an engineering master's degree in 2014, he held several positions (from junior engineer to operations manager) in varied companies (from multinational corporations to start ups) in France and the USA. He first experienced boredom, several human deceptions and started to search for meaning in his companies' activities until working for an engineering consultancy involved in reducing the industries' carbon emissions.

He finally realized he was much more interested in the human side of work than his technical or financial responsibilities and started his conversion in 2023.

Classification de Session: Mental health: balancing private and professional life

ID de Contribution: **70**

Type: **Non spécifié**

Nicolas Cornuault

samedi 17 mai 2025 11:15 (1h 15m)

Nicolas Cornuault is a high school teacher since 2021, and currently at Lycée Rosa-Parks in Saint-Denis. He teaches physics, chemistry and science history. He received a PhD in astrophysics in 2017 from the Institut d'astrophysique de Paris and worked for three years as a postdoctoral researcher at the Racah Institute in the Hebrew University in Jerusalem.

Classification de Session: Round Table: Education - Teaching