

Université Paris-Saclay in **2022**

Looking back on a *sacré* year at Université Paris-Saclay:

Institutional and scientific highlights

Our researchers

The University in facts and figures

université
PARIS-SACLAY

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**LOOKING BACK ON A *SACRÉ* YEAR
AT UNIVERSITÉ PARIS-SACLAY!**

Retrospective



Retrospective

• JANUARY

11/01/2022

#Education #Sustainable Development

UNIVERSITÉ PARIS-SACLAY PUBLISHES AN OPEN ACCESS E-BOOK ON THE "CHALLENGES OF THE ECOLOGICAL TRANSITION"

Université Paris-Saclay published an open access, free e-book on the "challenges of the ecological transition". The book is a collaborative work, written by more than 40 researchers and lecturers from all disciplines at the University.

https://www.universite-paris-saclay.fr/sites/default/files/2022-01/pr_open_access_ecological_transition_e-book.pdf

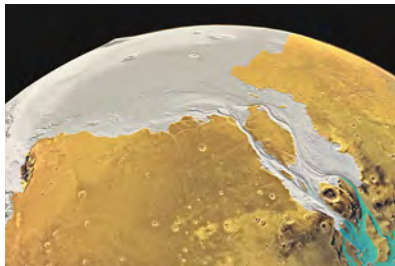
18/01/2022

#Research #Space

A STABLE OCEAN ON MARS THREE BILLION YEARS AGO

The history of the climate of Mars still bears many questions. An international team including researchers from the Paris-Saclay Geosciences Laboratory (GEOPS - CNRS/Univ. Paris-Saclay) released new findings demonstrating that approximately three billion years ago, the Martian climate could have been both wet and cold. Their work was published in the journal PNAS on 18 January 2022.

<https://www.universite-paris-saclay.fr/en/news/stable-ocean-mars-three-billion-years-ago>



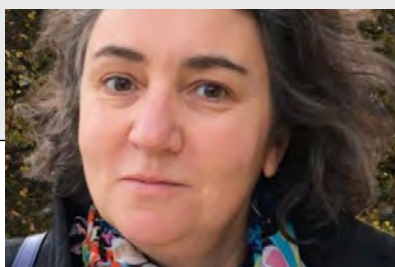
25/01/2022

#Science and society #Physics #Outreach

UNIVERSITÉ PARIS-SACLAY HOSTS THE FINAL OF THE 29TH EDITION OF THE FRENCH PHYSICS OLYMPIAD

On 28 and 29 January 2022, Université Paris-Saclay hosted the final of the national French Physics Olympiad. The 29th edition of the competition was sponsored by Sylvie Retailleau, President of Université Paris-Saclay and Professor of Physics.

<https://www.universite-paris-saclay.fr/en/news/final-29th-edition-french-physics-olympiad>



RESEARCHER PORTRAIT OF THE MONTH

Stéphanie Baumberger

>> [Developing products from agricultural activity](#)

Retrospective

• FEBRUARY

04/02/2022

#Innovation #Research #Public Private Partnership

THE PARIS SACLAY CANCER CLUSTER ASSOCIATION IS OFFICIALLY CREATED AND APPOINTS ITS LEADERS

The Paris Saclay Cancer Cluster project was first announced by French President Emmanuel Macron as part of the CSIS in June 2021. Its missions and goals were unveiled on 4 February 2022 at Gustave Roussy. The event was attended by Olivier Véran, Minister for Solidarity and Health, Frédérique Vidal, Minister for Higher Education, Research and Innovation and representatives of the cluster's five founding members: Sanofi, Gustave Roussy, Inserm, the Institut Polytechnique de Paris and Université Paris-Saclay.

https://www.universite-paris-saclay.fr/sites/default/files/2022-02/eng_cp_psc - 04_02_22- vf-1_ko.pdf

23/02/2022

#Student life #International #Entrepreneurship

SEVENTEEN STUDENT ENTREPRENEURS FROM UNIVERSITÉ PARIS-SACLAY HEAD FOR THE SILICON VALLEY

They may be students but they are also entrepreneurs! On 27 February 2022 the seventeen winners of the Start-Up Challenge 2021-2022 headed to the Silicon Valley for an immersive entrepreneurial experience. An exciting programme of company visits, networking events and meetings with young entrepreneurs, founders and alumni awaited them!

https://www.universite-paris-saclay.fr/sites/default/files/2022-02/pr_seventeen_upsacly student entrepreneurs head for the silicon valley.pdf



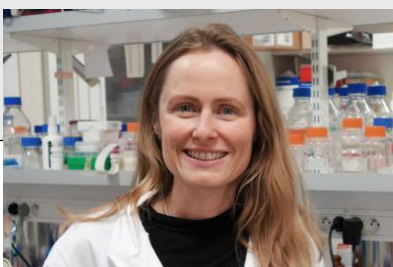
25/02/2022

#Solidarity #International

SUPPORT MEASURES FOR UKRAINE

Université Paris-Saclay joined the association France Universités and other French and European universities in extending its support to Ukraine's academic, scientific and student communities and their families during the tragic time. More than ever, our institution defends the fundamental values of peace and democracy, and strengthens its support to the freedom of people and ideas.

<https://www.universite-paris-saclay.fr/en/news/support-measures-ukraine>



RESEARCHER PORTRAIT OF THE MONTH

Stéphanie Bury-Moné

>> [Revealing the hidden potential of bacteria](#)

Retrospective

• MARCH



07/03/2022

#Institutional news #Gender Equality

GENDER EQUALITY WEEK 2022 – THE BIG PICTURE: ART & GENDER

To mark International Women's Day, Université Paris-Saclay organised a Gender Equality Week which began on 7 March. In 2022, the University and the artist Catel created an exhibition dedicated to women artists, "The Big Picture: Art and Gender". The University also published a practical guide on gender-inclusive language.

<https://www.universite-paris-saclay.fr/en/news/gender-equality-week-2022-big-picture-art-gender>

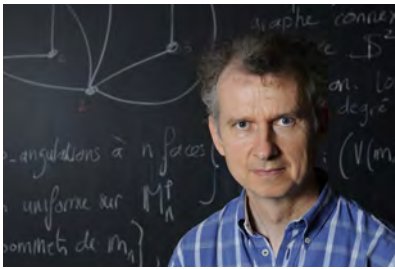
09/03/2022

#Prizes and Awards #Mathematics

JEAN-FRANÇOIS LE GALL, PROFESSOR AT THE ORSAY MATHEMATICS LABORATORY, IS AWARDED THE 2022 BBVA FOUNDATION FRONTIERS OF KNOWLEDGE IN BASIC SCIENCES AWARD

The 2022 BBVA Foundation Frontiers of Knowledge award in Basic Sciences was awarded to Jean-François Le Gall, Professor of Mathematics at Université Paris-Saclay and researcher at the Orsay Mathematics Laboratory (UPSaclay/CNRS). He shared the prestigious award with Charles Fefferman, Professor of Mathematics at Princeton University. The two laureates were rewarded for opening "new perspectives in mathematical analysis and probability theory, which have had a great influence on a generation of mathematicians."

https://www.universite-paris-saclay.fr/sites/default/files/2022-03/cp_jean-francois_le_gall_prix_bbva_en.pdf



RESEARCHER PORTRAIT OF THE MONTH

Tribute to Matthieu Roy-Barman

>> [Using isotope tracers to understand the ocean](#)

Retrospective

• APRIL

07/04/2022

#Partnership #Education #Research #Oncology



GUSTAVE ROUSSY AND UNIVERSITÉ PARIS-SACLAY SIGN AN AGREEMENT TO STRENGTHEN THEIR COLLABORATION

Sylvie Retailleau, President of Université Paris-Saclay, and Fabrice Barlesi, CEO of Gustave Roussy, signed a collaboration agreement on Wednesday 6 April 2022, aiming to strengthen the already close ties in all areas of cancer research, for both education and development.

https://www.universite-paris-saclay.fr/sites/default/files/2023-01/pr_gustave_roussy_upsaclay_partnership_agreement.pdf

29/04/2022

#International collaboration #AI

INTERNATIONAL LAB DEDICATED TO ARTIFICIAL INTELLIGENCE LAUNCHED IN MONTREAL

A consortium of research organisations joined forces to establish a new International Research Laboratory (IRL) focused on artificial intelligence (AI) in Montreal. The new centre brings together McGill University, École de technologie supérieure (ÉTS), Mila – Quebec AI Institute, the French National Centre for Scientific Research (CNRS), Université Paris-Saclay, and the École CentraleSupélec. The move consolidates Montreal's status as a leader in AI.

https://www.universite-paris-saclay.fr/sites/default/files/2022-04/international_lab_dedicated_to_artificial_intelligence_kicks-off_in_montreal_4.pdf



RESEARCHER PORTRAIT OF THE MONTH

Jean-Jacques Greffet

>> [Controlling light at the nanoscale](#)

Retrospective

• MAY

06/05/2022

#Research

83% OF THE GENETIC HERITAGE OF VANILLA HAS BEEN DETERMINED

Almost all of the vanilla sold worldwide comes from a single species: *Vanilla planifolia*. The limited genetic variability of cultivated vanilla makes the sector particularly vulnerable to climate and health risks. In publishing the sequence for 83% of the *Vanilla planifolia* genome, a research consortium coordinated by CIRAD Réunion has paved the way for more effectively targeted, faster creation of new varieties. The discovery is the result of four years of research by a French consortium comprising two private firms, Eurovanille and V. MANE FILS, and six public research organisations: CIRAD, the University of La Réunion, INRAE, CNRS, Université Paris-Saclay and Etablissement Vanille de Tahiti.

https://www.universite-paris-saclay.fr/sites/default/files/2023-01/press_release_-_83_percent_of_the_genetic_heritage_of_vanilla_has_been_determined-1.pdf

11-13/05/2022

#International #Innovation

UNIVERSITÉ PARIS-SACLAY HOSTS THE WEEK OF INNOVATIVE REGIONS IN EUROPE (WIRE)

Europe's main political forum for innovation and regional development, the 12th edition of the Week of Innovative Regions in Europe (WIRE) was held at Université Paris-Saclay as part of the French Presidency of the Council of the European Union. The theme of this year's edition was 'Towards a leading Europe in breakthrough innovation: unleashing the potential of regions'.

https://www.universite-paris-saclay.fr/sites/default/files/2022-05/pr_universite_paris-saclay_hosts_wire_11-13_may_22.pdf



RESEARCHER PORTRAIT OF THE MONTH

Claire Thomas-Junius

>> [Studying metabolism to customise sports coaching](#)

Retrospective • JUNE-JULY

14/06/2022

#Open Science #Research

UNIVERSITÉ PARIS-SACLAY UNVEILS ITS STRATEGY FOR OPEN SCIENCE

Université Paris-Saclay published its Open Science Roadmap. Through eight objectives inspired by those set out in the European Commission's Open Science policy, Université Paris-Saclay intends to play a key role in opening up science. As part of this, the University's researchers have access to BiblioHAL, a unique digital platform which allows them to deposit their publications in the open archive HAL.

https://www.universite-paris-saclay.fr/sites/default/files/2022-06/pr_upsaclay_open_science_roadmap.pdf

27/06/2022

#Research #International

THE ACADEMIC WRITING CENTER CELEBRATES ITS FIRST YEAR OF SERVICE TO THE ACADEMIC COMMUNITY OF UNIVERSITÉ PARIS-SACLAY

Since its launch a year ago, the Academic Writing Center (AWC) at Université Paris-Saclay has supported PhD candidates, researchers and academic staff to improve the linguistic quality of their work in English, i.e. scientific papers, lectures, conferences and other professional events, helping them to give greater impact to their scientific communication. Almost one of a kind in France, the AWC was originally coordinated by CentraleSupélec before rapidly expanding its services to reach the entire University.

https://www.universite-paris-saclay.fr/sites/default/files/2022-06/pr_academic_writing_center_upsaclay.pdf



RESEARCHER PORTRAIT

Michel Beaudouin-Lafon

>> [Seeing it as a collaborative tool](#)

Retrospective
• JUNE-JULY



29/06/2022

#Presidential appointment #Institutional news

ESTELLE IACONA ELECTED PRESIDENT OF UNIVERSITÉ PARIS-SACLAY

On Tuesday 28 June 2022, Estelle Iacona was elected President of Université Paris-Saclay during a meeting held by the members of the University's Governing Board. Professor Estelle Iacona has been Vice President for the University's Governing Board since March 2020. Since the appointment of Sylvie Retailleau as Minister of Higher Education and Research to the French government on 20 May 2022, Estelle Iacona has been the University's interim president.

https://www.universite-paris-saclay.fr/sites/default/files/2022-06/pr_estelle_iacona_elected_president_upsaclay.pdf



05/07/2022

#Research #Mathematics #Awards

HUGO DUMINIL-COPIN, FRENCH MATHEMATICIAN AND PROFESSOR AT THE INSTITUT DES HAUTES ÉTUDES SCIENTIFIQUES, HAS BEEN AWARDED THE FIELDS MEDAL

Hugo Duminil-Copin, a French mathematician specialising in probability theory, and a permanent professor at the Institut des Hautes Études Scientifiques (IHES) since 2016, was awarded the Fields medal at the International Congress of Mathematicians in Helsinki. Considered to be the most prestigious international award in mathematics, the Fields Medal rewards Hugo Duminil-Copin for his exemplary scientific career and exceptional contributions to the advancement of mathematical sciences. Hugo Duminil-Copin is also an ordinary professor of mathematics at the Faculty of Science at the University of Geneva.

https://www.universite-paris-saclay.fr/sites/default/files/2022-07/220705_pr_hdc_engl_embargoed.pdf



RESEARCHER PORTRAIT

Stéphane Bazot

>> [Understanding the ecology of the plant-soil system](#)

Retrospective

• **AUGUST -
SEPTEMBER**



15/08/2022

#Shanghai Ranking #Excellence

THE 2022 SHANGHAI RANKING: FOR THE THIRD CONSECUTIVE YEAR, UNIVERSITÉ PARIS-SACLAY REMAINS IN THE GLOBAL TOP 20

On 15 August 2022, Shanghai Jiao Tong University published its annual Academic Ranking of World Universities (ARWU). Université Paris-Saclay was ranked 16th globally and 1st in continental Europe, confirming its position as a world-class research-intensive university. These strong results echo the University's performance in the Global Ranking of Academic Subjects (GRAS) published on 19 July 2022. As in 2020 and 2021, Université Paris-Saclay was ranked 1st in the world for Mathematics and 9th for Physics. The University also appeared in the global top 50 for 10 subjects and in the top 100 for an additional 17 disciplines, a strong indication of the institution's research excellence.

https://www.universite-paris-saclay.fr/sites/default/files/2022-08/pr_upsaclay_2022_shanghai_ranking_arwu.pdf

12/09/2022

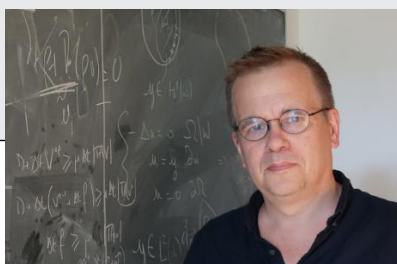
#Research #Astrophysics #James Webb



THE JAMES WEBB TELESCOPE: FIRST IMAGES OF THE ORION NEBULA

An international research team released the first images of the Orion Nebula, the closest richly productive stellar nursery to our own solar system. Captured by the James Webb Space Telescope, these pictures demonstrate once again the exceptional capacities of this scientific instrument. Headed jointly by researchers from the French National Centre for Scientific Research (CNRS), Université Paris-Saclay and the University of Western Ontario in Canada, the observations also involved astronomers from the Observatoire de Paris-PSL, with the backing of the CNES (French National Centre for Space Studies).

<https://www.universite-paris-saclay.fr/sites/default/files/2023-01/cpcnrs-orionjwst-engok.pdf>



RESEARCHER PORTRAIT

Bertrand Maury

>> [Mathematising reality](#)

Retrospective

• OCTOBER



04/10/2022

#Prizes and awards #Research #Physics

THE 2022 NOBEL PRIZE IN PHYSICS AWARDED TO ALAIN ASPECT FOR HIS RESEARCH ON QUANTUM PHYSICS

Alain Aspect, a research professor emeritus at the CNRS, professor at the Institut d'Optique Graduate School/Université Paris-Saclay, ENS Paris-Saclay, and École polytechnique, as well as member of the Charles Fabry Laboratory (Institut d'Optique Graduate School/CNRS, Université Paris-Saclay), was awarded the 2022 Nobel Prize in Physics. He shared the prize with John F. Clauser of the United States and Anton Zeilinger of Austria for their pioneering research on quantum entanglement, which paved the way for quantum technology.

<https://www.universite-paris-saclay.fr/en/news/alain-aspect-2022-nobel-prize-physics>

06/10/2022

#AI #Education

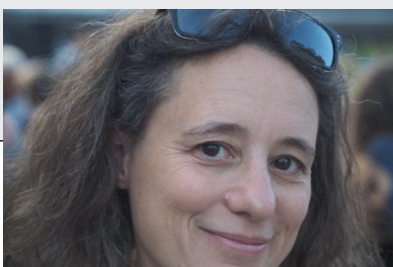
LAUNCH OF THE SACLAI-SCHOOL TRAINING PROGRAMME

The SaclAI-School programme at Université Paris-Saclay aims to develop an ambitious and innovative School of Artificial Intelligence (AI) based on multidisciplinary or AI-centred education. The programme is coordinated by the DATAIA Institute: Université Paris-Saclay's Institute for Artificial Intelligence.

https://www.universite-paris-saclay.fr/sites/default/files/2023-01/pr_saclai_school.pdf

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Science des données, Intelligence & Société



RESEARCHER PORTRAIT OF THE MONTH

Fabienne Goldfarb

>> [From light-matter interaction to laser dynamics](#)

Retrospective

• NOVEMBER

17/11/2022

#Medical research

SUBCUTANEOUS CHEMOTHERAPY, A SOLUTION TO EASE CANCER TREATMENT?

With ten million deaths each year, cancer is one of the leading causes of death worldwide. While there are treatments, such as chemotherapy, they often cause very painful side effects for patients and involve many logistical constraints. Researchers at Université Paris-Saclay have developed a new type of chemotherapy that can be administered subcutaneously. The aim is to make this therapy more comfortable, more effective, and thus revolutionise cancer treatment.

<https://www.universite-paris-saclay.fr/en/news/subcutaneous-chemotherapy-solution-ease-cancer-treatment>

18/11/2022

#Government visit #Quantum

FRENCH PRIME MINISTER ELISABETH BORNE VISITS THE INSTITUT D'OPTIQUE GRADUATE SCHOOL/UNIVERSITÉ PARIS-SACLAY

To mark the first anniversary of the launch of the investment plan, France 2030, the French Prime Minister, Elisabeth Borne, visited the Institut d'Optique Graduate School/Université Paris-Saclay today to meet Alain Aspect, winner of the Nobel Prize in Physics 2022, at the Charles Fabry Laboratory (Université Paris-Saclay/Institut d'Optique Graduate School/CNRS). After visiting two rooms dedicated to quantum gas and quantum optics, the Prime Minister spoke with Georges-Olivier Reymond, CEO of Pasqal, a start-up specialising in quantum computing which develops quantum processors and which was also co-founded by Alain Aspect himself.

<https://www.universite-paris-saclay.fr/en/news/french-prime-minister-elisabeth-borne-visits-institut-doptique-graduate-school/universite-paris-saclay>



22/11/2022

#Sexual and Gender-Based Violence

UNIVERSITÉ PARIS-SACLAY STEPS UP ITS COMMITMENT AGAINST SEXUAL AND GENDER-BASED VIOLENCE (SGBV)

For several years now, Université Paris-Saclay has been committed to an ambitious policy aimed at combatting all forms of sexual and gender-based violence, based on a zero tolerance and prevention for all approach. While various actions take place throughout the year across the University's different campuses, the week of 25 November, the International Day for the Elimination of Violence Against Women, is a key time for mobilisation.

https://www.universite-paris-saclay.fr/sites/default/files/2023-01/pr_sgbv_policy.pdf



RESEARCHER PORTRAIT OF THE MONTH

Évelyne Contejean

>> [Avoiding computer bugs](#)

Retrospective

• December

05/12/2022

#Inauguration #Research #Medicine



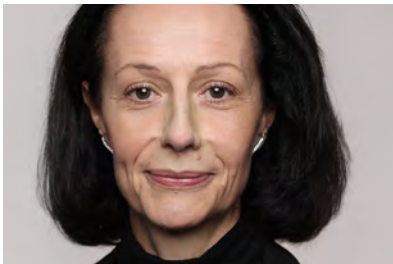
INAUGURATION OF THE PARIS-SACLAY FACULTY OF MEDICINE'S NEW RESEARCH BUILDING

The new research building at the Paris-Saclay Faculty of Medicine was inaugurated on Monday 5 December 2022 by Sylvie Retailleau, Minister of Higher Education and Research, Valérie Pécresse, President of the Île-de-France Region, Olivier Capitanio, President of the department of Val de Marne, Estelle Iacona, President of Université Paris-Saclay, and Didier Samuel, Dean of the Paris-Saclay Faculty of Medicine.

https://www.universite-paris-saclay.fr/sites/default/files/2023-01/pr_faculty_of_medicine_new_building_inaug.pdf

19/12/2022

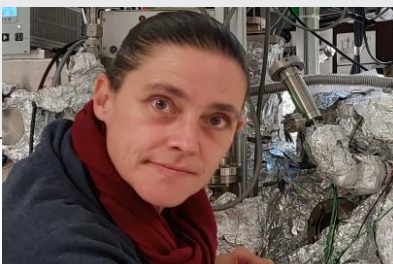
#Communication #Recruitment



KARINE WECKER APPOINTED HEAD OF BRAND AND COMMUNICATION AT UNIVERSITÉ PARIS-SACLAY

Karine Wecker has been appointed Head of Brand and Communication at Université Paris-Saclay as of 1 January 2023.

https://www.universite-paris-saclay.fr/sites/default/files/2023-01/pr_karine_wecker.pdf



RESEARCHER PORTRAIT OF THE MONTH

ANNE LAFOSSE

>> [Understanding the processes induced by electrons](#)

Key facts and figures



10 constituent faculties, university technical institutes and engineering schools

4 *Grandes écoles*



1 Institut des Hautes Études Scientifiques



6 national research organisations



230 laboratories



7,400 researchers and academic staff



13,000 scientific publications per year



48,000 students



4,300 PhD candidates

RANKED AMONG THE BEST IN THE WORLD



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