Call for application

Internal Chairs / Fellowships Program –2026

Deadline for applications:
January 8, 2026, 1.00 PM Paris time

Hi! PARIS is pleased to announce and present the second Internal Chairs / Fellowships Program within Hi! PARIS Cluster 2030.

Hi! PARIS is the interdisciplinary Center on Data Analytics and Artificial Intelligence for Science, Business and Society created in 2020 by Institut Polytechnique de Paris (IP Paris) and HEC Paris and joined by Inria in 2021. Extended as an IA Cluster (funded within France 2030), the center aims at becoming a world class research, training and innovation hub with its enlarged partnership with Inria, CNRS and Université de Technologie de Troyes. One of the central aims of Hi! PARIS is to **conduct breakthrough and multidisciplinary research on AI and Data Science**. Hi! PARIS Center is also funded by corporate donors, which currently are L'Oréal, Capgemini, TotalEnergies, VINCland Schneider Electric.

A central goal of Hi! PARIS is to **provide long-term incentives to promote research and teaching in AI and Data Analytics for Science, Business and Society**. To this end, Hi! PARIS has created an Internal Chairs / Fellowships program, which provides funding for researchers from Hi! PARIS Cluster 2030 affiliated research teams within Institut Polytechnique de Paris schools (École polytechnique, ENSTA, École Nationale des Ponts et Chaussées (ENPC), ENSAE Paris, Télécom Paris, Télécom SudParis), HEC Paris, Inria (*Centre Inria de IP Paris*) and CNRS.[1]

Fellowships are allocated through an open call.

1. Research areas and priorities

All research domains related to AI and Data Analytics for Science, Business and Society are eligible, but a higher priority will be given to the seven strategic domains of Hi! PARIS Cluster 2030 highlighted below:

- Axis 1 – Mathematical foundations of AI
- Axis 2 – Foundation models
- Axis 3 – Trustworthy and sustainable
- Axis 4 – AI for sciences and engineering
- Axis 5 – AI in cyberphysical systems and robotics
- Axis 6 – AI for Society
- Axis 7 – AI for the Economy

Further details on these seven strategic priorities are given in the Appendix.

[1] UTT researchers are not eligible for the fellowships

2. Types of fellowship and funding

Successful candidates, known as **Hi! PARIS Fellows, will receive a budget** with some flexibility in its allocation between salary, research, scientific events organization, and funding of PhD students or post-doc. In exchange, Hi! PARIS Fellows are expected **to contribute to (i) the scientific life of the center, (ii) teaching in relevant fields for the center, and (iii) supervise Ph.D students**. Sections 4 and 5 below provide more details on the various types of Fellowships and corresponding obligations for the Fellows.

Two types of fellowships are offered:

- Standard Fellowships with one or two fellows from the same institution
- Synergy Fellowships (SyG) with two to four fellows from several institutions
  Synergy fellowships are designed to promote collaboration between our institutions and to meet complex challenges. This funding mechanism objectives are to encourage ambitious, interdisciplinary research projects and strengthen connections between laboratories and teams.

To make this program accessible to many candidates, and to consider the level of seniority, two categories of fellowships are offered:

- Starting: ≤ 7 years after PhD
- Advanced: > 7 years after PhD (*e.g. PhD in 2018 or before*)

The fellowships funding depends on the seniority level of the proposed fellowship holders. Concerning the seniority level of the standard fellowship with two chairs from the same institution, the choice is left to the discretion of the applicants; the chosen budget should be in line with the real involvement of the fellows. The given budget is for one fellowship, even if the project is co-chaired by two fellows. Table 1 provides details about (i) the duration of each Fellowship, (ii) its maximum total budget over the entire duration of the Fellowship, and (iii) eligible expenses for the budget.

The fellowship project is to be designed for 3 years, but already engaged (during the initial 3 years) expenses can be spread over a period of 4 years, this allows the fellow to recruit to reinforce his/her team (Phd student, post doc or engineer).

Seniority level	**Duration**	**Max funding (over the full period)**	**Eligible expenses**
Starting *(≤ PhD + 7)*	3 years	200 k€	Research Budget + Hi! PARIS scientific event + PhD grant + potential additional compensation for the Fellows (max 10 k€ (gross)/year)
Advanced *(> PhD + 7)*	3 years	365 k€	Research Budget + Hi! PARIS scientific event + PhD grant + recruitment of engineers/post docs/visiting professors + potential additional compensation for the Fellows (max 10k€ (gross)/year)

Table 1 – Type of fellowship and funding

Each fellowship will be conditioned to the obtention of **private co-funding** (15% of the total funding for starting chairs and 25% for advanced chairs).

Seniority level	**Duration**	**Overall Max funding**	**Hi! PARIS Cluster 2030 funding (Maximum)**		**Private co-funding (Minimum)**		**Condition**
Starting *(≤ PhD + 7)*	3 years	**200 k€**	170k€	(85%)	30 k€	(15%)	convincing plan to be proposed by the fellow in the proposal
Advanced *(> PhD + 7)*	3 years	**365 k€**	274 k€	(75%)	91 k€	(25%)	

Specificity for the Synergy Fellowships:

- **The seniority level** of the Synergy Fellowship will be decided accordingly to the older candidate (by default), but the proposers may opt to choose the starting seniority level if the main PI is from the starting level.
- **The number of chairs will impact the amount of budget:**
  - A project proposal with two chairs will ask for a budget of one fellowship
  - A project with three to four chairs will ask for a budget of up to two fellowships
- **Private cofounding is requested.** Synergy Fellowships are subject to the same rule for private co-funding, according to the level of seniority and requested budget.

The budget will be made available in each of the chairs employing institution as detailed in the budget description of the proposal.

3. Commitments of the fellows

Successful candidates will agree with the following commitments:

- **Chair holder involvement:** The Chair holder should be strongly involved in the fellowship with an individual involvement of at least 20% of his/her full time.
- **Production of scientific knowledge:** Fellows are expected to produce scientific knowledge in AI and Data Analytics for Science, Business and Society at the highest international standards, as evidenced by publications in high impact scientific journals.
- **Academic participation:** Fellows are expected to give lectures, take part in seminars, and, whenever possible, contribute to doctoral courses thereby participating to the scientific vitality of the Center.
- **Education:** Fellows are expected to contribute to education in areas of interest for the Center. For professors already involved in teaching in this domain, it is not requested to exceed their teaching service.
- **Publication and affiliation:** All scientific work carried out during with the fellowship funds must acknowledge the support of Hi! PARIS Cluster 2030. Information about the acknowledgement will be given to the fellows.
- **Submission of an ERC proposal** within the first 2 years of the fellowship project.
- **Private co-funding:** Fellows are expected to provide private co-funding (at least 15% of total public funding for starting fellows and 25% for advanced fellows). For a limited number of projects, this co-funding could be obtained from the corporate funding of Hi! PARIS but subject to a clear and dedicated interest of the corresponding corporate donor in the proposal. Private co-funding does not need to be confirmed by the deadline of proposal submission but the plan to obtain this co-funding should be convincing and well described in the proposal.

4. Eligibility and admissibility

To apply and participate in Hi! PARIS Cluster 2030 Fellowships Program, the candidates must meet the following criteria to ensure effective and productive involvement in Hi! PARIS research teams in France.

Are eligible to the present call, all professors and researchers (all seniority levels) from Hi! PARIS Cluster 2030 affiliated research teams within Institut Polytechnique de Paris schools (École polytechnique, ENSTA, École Nationale des Ponts et Chaussées (ENPC), ENSAE Paris, Télécom Paris, Télécom SudParis), HEC Paris, Inria (*Centre Inria de IP Paris*) and CNRS.

Are not eligible to the present call, all professors and researchers who are Principal Investigators of an ongoing ERC project or who are member of the Steering committee (SteerCo) of Hi! PARIS Cluster 2030. The professors/researchers members of the other Cluster 2030 operational committees (Hi! PACE, SCOMOP, InCo) are eligible.

Incomplete applications will not be admissible, and no applications will be accepted after the submission deadline.

Hi! Paris is strongly committed to promoting equality, diversity, and inclusion in all aspects. Applications are particularly welcome from women and candidates from ethnic minority backgrounds currently underrepresented in AI roles.

"Following the ERC template, eligibility in the Starting seniority level category can be extended for reasons such as maternity, paternity, or parental leave, illness, national service, clinical training, natural disasters, asylum, or for victims of gender-based violence or any other form of violence. Check out the Parental leave instructions in ERC for the specific rules regarding eligibility criteria."

5. Application requirements

The applications should be submitted, at the latest on the date of the deadline, as one pdf file at:
https://easychair.org/conferences/?conf=hiparisfellowship26

The project proposal written **in English** should be composed of **one single pdf file** combining the following documents:

1. **Cover letter:** One page with a header with the applicant's last name, its affiliation, the type of fellowship (e.g. Starting, Advanced, Synergy) and a summary of his research proposal.
2. **Research project:** Propose a detailed research proposal for the duration of the fellowship project (including your objectives, prospects for technological development, and potential applications or technology transfer), and its deliverables. 5 pages.
3. **Budget description:** in brief, and the private co-funding plan. ½ page
4. **Curriculum Vitae:** Provide an up-to-date CV including your academic background, publications, previous research experience and any other elements relevant to your application. Max 2 pages.
5. **Track record:** Track record (up to the last ten years), including a list of 1 to 10 representative publications or working papers and narrative information on groundbreaking research in the past.

A template is provided: The font types should be Times New Roman, Arial or similar, with size font of at least 11pt, single line spacing and margins with 2 cm side and 1.5cm for top and bottom.

Tips for a successful application:

- Make sure you satisfy the criteria mentioned above, and make sure that your application is complete and does not lack any of the requested documents.

- Consider the overall goals and expectations of Hi! PARIS Internal Chairs / Fellowships program when writing your research proposal.

6. Evaluation process and selection criteria

The evaluation process is launched as soon as the deadline is passed. The proposals are evaluated by a panel of experts made-up of non-eligible internal experts from the affiliated institutions and members from the Hi! PARIS Scientific Advisory Board. External reviewers could be involved in the evaluation process, if necessary and according to their expertise.
Based on these evaluations, the Hi! PARIS Cluster Steering Committee will propose a list of candidates for the decision of the Hi! PARIS Cluster Governance Committee. Successful candidates will be appointed for three years. Renewal of Fellowships is subject to a new application.

The project proposals will be prioritized according to the following criteria:

- **Excellence of research:**
  - Originality and relevance of the scientific project.
  - Innovative contribution aligned with the cluster's strategic axes - respecting the balance between axes, high-risk/high-gain research, relevance, feasibility.
- **Excellence of applicant:**
  - Groundbreaking research in the past and role, capacity to execute proposed research, capacity to propose a solid ERC proposal within 2-3 years.
  - Influence and demonstrated impact (publications, international collaborations, awards, doctoral supervision). An internal chair may have several holders.
- **Influence and expected impact:** strengthening of national and international influence, academic, industrial and societal benefits.
- **Private co-funding:** level of private co-funding obtained and/or capacity in obtaining private co-funding.

In addition, for the Synergy Fellowships, the following criteria will be considered:

- **Quality and complementarity of the applicants**.

7. Important dates (indicative)

- January 2, 2026 – Applications opening
- January 8, 2026, at 1:00 PM (Paris Time) – Deadline for applications
- January – March 2026 – Evaluation of applications
- April 2026 – Funding decision and notification to applicants
- From July 2026 – Starting date of the Hi! PARIS Fellowship

8. Further information

- For any further information on the Center: https://www.hi-paris.fr/
- For any further information, please contact project@hi-paris.fr with "Hi! PARIS Call Internal Chairs / Fellowships program" in the subject.

9. Appendix: Research priorities

- **Axe 1 – Mathematical foundations of AI**

Research in this field covers among others, high-dimensional probability, computational optimal transport, causal inference, implicit regularization and scalable Bayesian inference. It also includes optimization, covering a wide spectrum ranging from global optimization to stochastic optimization, with a particular interest on massively distributed / federated learning, tackling issues like statistical heterogeneity, communication constraints, and privacy control. In addition, the mathematical foundations of Deep Learning are of particular interest, including, among others, training dynamics, new transformer architectures, understanding overparameterization, uncertainty quantification, and overcoming the curse of dimensionality.

- **Axe 2 – Foundation models**
  Research in this area encompasses several key objectives. The first objective is to create light-weight generative models that can be efficiently trained: Directions of research include reducing computational requirements by leveraging efficient attention architecture, knowledge distillation, pruning, quantization. Of special interest is the development of better parallelism with the objective of training billion-scale LLMs on low-bandwidth GPU networks. A second objective is to enhance robustness and fairness: (i) Augment training data with counterfactual or debiased examples; (ii) fine-tune generative models to align the model's behavior with desired values; (iii) prompt engineering. We want also to address societal challenges: (i) Disentangling the real and the fake; (ii) devising regulatory approaches. A third objective is to develop cross-modal learning: (i) Representation fusion - How can different modalities (e.g., text, images, audio) be fused to create a representation that captures the relationships between modalities? (ii) Scalability: How can multimodal generative models be scaled to handle large and diverse datasets? (iii) Evaluation Metrics - What are the appropriate evaluation metrics for assessing the quality, diversity, and coherence of generated multimodal content? We are also willing to explore creative AI applications such as text, image, and audio generation and creative design, addressing ethical, economic, and security issues related to AI-generated content, and developing mechanisms to detect AI-generated content.

- **Axe 4 – AI for sciences and engineering**
  In computational statistical physics, AI refines coarse-grain techniques and facilitates AI-driven sampling methods for applications in chemistry and biology, using neural flows, variational auto-coder, and diffusion models. Our strategy will be to significantly develop our research agenda in computational physics, molecular dynamics, and materials sciences. We will significantly develop our research effort in smart industries to promote sustainability by enabling, among others: predictive maintenance, optimal control under uncertainty, process optimization using digital twins. Smart energy is also an area where we will invest, covering building energy management and micro grid control, and energy markets, developing joint research programs with E4C and S&O . We will also develop smart mobility to integrate AI in the management strategies in transportation systems to enhance the efficiency, safety, sustainability, and comfort, drawing links with LMVT . All these methods take their roots in operations research, a domain AI is playing an increasingly important role.

- **Axe 3 – Trustworthy and sustainable AI**
  It is important to develop AI systems that are not only mathematically sound and effective, but also that meet important properties. This axis then includes a comprehensive research program that spans mathematics, computer science, and social sciences. Key areas in this axis include: (i) AI and privacy (ii) Fairness (iii) Efficiency: (iv) Robustness against adversarial attacks, noisy labels, outliers, etc. (v) Explainability.

- **Axe 5 – AI in cyberphysical systems and robotics**
  With the convergence of AI with cyber-physical systems (CPS) and IoT reshaping industries and smart cities, new research areas are emerging. These include developing distributed AI for edge device efficiency, predictive maintenance with machine learning to detect anomalies, improving security in connected devices, and developing adaptive self-learning system. The role of AI in digital twins for system simulation is also increasing. Key future research directions the development of adaptive self-learning AI capable of autonomously learning from data streams in dynamic environments the development of AI algorithms for real-time analytics and decision making that process large streams of sensor data for immediate action. The

integration of autonomous systems and robots with AI has ushered in a new era in which our ambition is to become a key player. A key point of convergence is perception, where robotics and computer vision intersect. Large-scale models used in natural language processing are now being explored for 3D perception tasks. There has also been a shift in control paradigms, as Deep Learning challenges traditional control approaches, for example, through end-to-end methods. However, real-world implementation of learned control on physical robots remains a challenge, opening a lot of research directions. In human-robot interaction, the need for adaptive patterns tailored to individual user profiles need also to be addressed with innovative tools . Fail-safe systems require the development of world models that bridge sensory data and decision making and effectively manage underlying uncertainties.

- **Axis 6 – AI for Society**
  In this axis, we are actively promoting connections between AI and the fields of human and social sciences. In this context, AI plays a dual role: it serves as a tool for tasks such as the analysis of large text corpora or complex graphs, while at the same time becoming an object of study itself. Our goals are many, and here are some examples:1) Law, regulation, algorithmic compliance: key directions of research include: (i) develop legal AI tailored to the EU civil law framework; (ii) develop AI solutions that are inherently compliant with legal requirements and ensure that they adhere to fundamental rights and sustainability benchmarks; and (iii) pioneer the integration of technology into legal tools such as statutes, contracts, and case law to increase their precision and effectiveness. 2) AI and the future of work: Assess the extent of the diffusion of AI technologies, investigate AI's influence on job contents, using e.g., NLP for semantic analysis of job advertisements, Highlight the significance of AI in the finance sector, from forecasting, investment recommendations, trading to payment systems, and consider the jobs created to create the AI hardware and data infrastructure, encompassing data preparation and abiotic resource management. 3) NLP and social sciences with public discourse and press media in the age of AI and social media: polarization, echo chambers, misinformation, social networks (use NLP methods for the algorithmic detection of bots, fact checking, misinformation) and Leveraging AI to detect new social trends (analyze both behaviors and sentiments – social media to assess opinions on global policy issues).

- **Axis 7 – AI for the Economy**
  We are here developing the interface between AI and economics. The connection between these two areas is becoming deeper as many markets now rely on AI and involve AI- powered agents:1) market design with artificial intelligence is revolutionizing the field of dynamic design and social learning. It introduces innovative methods for creating online market platforms that are not only efficient but also resilient to strategic manipulation by participants, ensuring strategy-proof mechanisms. New designs should prioritize fair treatment and privacy of all participating agents. 2) transforming the workforce through AI: We are merging the fields of economics and data science to develop and evaluate algorithms aimed at reducing inefficiencies in the labor market, working with public employment services. One side goal is to develop practical recommender systems. 3) Human-Algorithm Engagement: we are exploring the complicated dynamics of how users engage with AI technologies. This includes studying the impact of algorithmic recommendations on user behavior and preferences. (4) Algorithm Interactions: We explore consequences of algorithm interaction, such as algorithmic collusion in areas such as electricity or financial markets, as well as potential model breakdowns. (5) AI and Countering Dark Patterns: We explore how AI can be used to detect and mitigate manipulative online strategies designed to influence consumer decisions, commonly referred to as "dark patterns."