

RESEARCH PROGRAM

ARTIFICIAL INTELLIGENCE

FRONTIER RESEARCH at the core of the French **national AI strategy**

Trustworthy AI and Distributed AI

Frugal AI and Embedded AI New Mathematical Foundations of Al

PEPR IA

CHALLENGES:

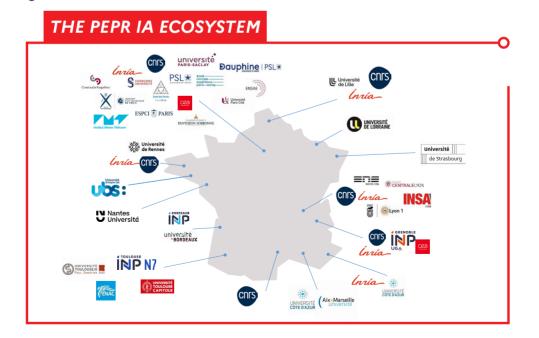
Artificial Intelligence (AI) is a strategic pillar for competitiveness and sovereignty in the digital age. To solidify its leadership, the French government, through the France 2030 investment plan, is strengthening its national AI strategy with the Priority Research Programme and Equipments on AI (PEPR IA). This ambitious initiative aims to break scientific barriers and tackle critical societal challenges, including sustainability, ecological transition, and technological sovereignty, ensuring France remains at the forefront of AI innovation and responsible development.

OBJECTIVES:

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With €73 million in government funding over six years, PEPR IA aims to tackle stimulating scientific challenges and lay the groundwork for technological breakthroughs that will benefit all French stakeholders in AI. The objectives of PEPR IA are the following:

- Advance the science of AI.
- Leverage France's history of excellence in mathematics to push back the foundational frontiers of AI.
- Position France as a global hub for top AI talents.
- Sustain the conditions for companies, especially startups, in France to get involved in AI deployment.



THE 9 PEPR PROJECTS

Sharp

Causali-T-AI

Sharp theoretical and algorithmic principles for When causality and AI teams up to enhance frugal ML

Holigrail

Hollistic approaches to greener model architectures for inference and learning

Adapting

Adaptive architectures for embedded AI

Emergences

Near-physics emerging models for embedded Al

Redeem

Resilient, decentralized and privacy-preserving machine learning

interpretability and robustness of AI algorithms

Foundry

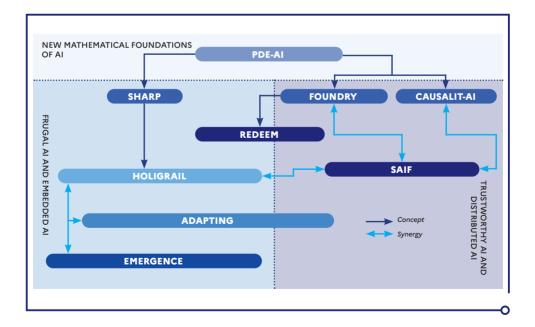
The foundations of robustness and reliability in artificial intelligence

Saif

Safe AI through formal methods

PDE-AI

Numerical analysis, optimal control and optimal transport for AI / "New architectures for machine learning".



Contact us: contact@pepr-ia.fr

To follow PEPR IA updates

www.pepr-ia.fr/en/accueil-english/



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