

## Conférence Doctorale AI for the Sciences

### Programme détaillé

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Programme Transverse  
DATA

Salle Raymond Aron - Université Dauphine PSL

Place du Maréchal de Lattre de Tassigny  
75775, Paris Cedex 16

		Mercredi 15 mai 2024		Jeudi 16 mai 2024	
		Nom	Titre	Nom	Titre
08:30	Accueil café				
09:00	Keynote Speaker	<b>Patrick Gallinari</b> Université Sorbonne, <i>Institut des systèmes intelligents et robotique (ISIR)</i>	Physics Aware Deep Learning	<b>Phillipe Nghe</b> ESPCI-PSL, <i>Laboratory of Biophysics and Evolution, CNRS</i>	Generating self-reproducing RNAs
10:00	Short talk	<b>Alessandro Pasqui</b> Collège de France-PSL <i>Centre interdisciplinaire de recherche en biologie (CIRB)</i>	Learning the optimal parameters governing confluent tissues to shape their emergent properties	<b>Pablo Jeken-Rico</b> Mines Paris- PSL <i>Centre de mise en forme des matériaux (CEMEF)</i>	Predicting Thrombus Formation Risk in Kawasaki Aneurysms using Machine Learning

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10:20	Short talk	<b>Amandine Brunetto</b> Mines Paris - PSL <i>Centre for Robotic (CAOR)</i>	Audio-Visual Learning for Perception Enhancement	<b>Chiara Semenzin</b> ENS-PSL	A computational approach to study dolphin acoustic communication
10:40	Pause				
11:10	Short talk	<b>Matthieu Blanke</b> ENS-PSL	Interpretable meta-learning of physical systems	<b>Ihab Bendidi</b> ENS-PSL <i>Centre de biologie computationnelle</i>	ChAda-ViT: Channel Adaptive Attention for Joint Representation Learning of Heterogeneous Microscopy Images
11:30	Short talk	<b>Blaise Delattre</b> Dauphine-PSL <i>Lamsade</i>	From Dynamical System to Robustness in Deep Learning	<b>Letizia Lamperti</b> EPHE-PSL <i>Centre d'Ecologie Fonctionnelle Evolutive (CEFE)</i>	Inferring ecosystem properties from eDNA sequences with interpretable Deep Learning
11:50	Short talk	<b>Claire Bizon-Monroc</b> ENS-PSL	A multi-agent reinforcement learning approach to wind farm control	<b>Zakarya Benayad</b> ENS-PSL	Enhanced conformational space exploration for biomolecules using denoising diffusion probabilistic models
12:10	Lunch	Posters Session			
14:00	Keynote Speaker	<b>Tom Charnock</b> Institut d'Astrophysique de Paris	Bayesian deep learning for cosmology and gravitational waves	<b>Jérôme Lang</b> Université Paris Dauphine-PSL, CNRS, LAMSADE	From AI to Computational Social Choice
15:00	Short talk	<b>Melissa Alzate Banguero</b> ESPCI - PSL <i>Laboratoire de Physique et d'Etude des Matériaux (LPEM)</i>	Towards neuromorphic computing: VO2 transition dynamics	<b>Daniele Cavalli</b> ENS-PSL <i>Chaire géopolitique du risque</i>	With and Beyond the Human: AI as Infrastructural Cognition

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15:20	Short talk	<b>Alexandre Verine</b> Dauphine-PSL <i>Lamsade</i>	Precision and Recall for generative models	<b>Stefano Vrizzi</b> ENS-PSL <i>Laboratoire de Neurosciences cognitives</i>	The market, bottom-up: a multi-agent reinforcement learning model to quantify the impact of individual cognitive traits on stock price formation
15:40	Pause				
16:10	Short talk	<b>Yuke Xie</b> Mines Paris - PSL <i>Centre de Géosciences</i>	Uncertainty quantification in computational inverse problem using deep generative model	<b>Pierre Orhan</b> ENS-PSL <i>Laboratoire des Systèmes Perceptifs</i>	Emergence of in-context structure detection through self-supervised learning
16:30	Short talk	<b>Maylis Peyret</b> Dauphine-PSL <i>LEDa- Centre de Géopolitique de l'Energie et des Matières Premières (CGEMP)</i>	Analyzing Metal Price Forecasts: A Comparative Study of VECM and XGBoost Models	<b>Linnea Evanson</b> ENS-PSL	Dynamics of speech representations in the brain of human children
16:50	Cocktail	Posters Session		<b>Colin Brisson</b> EPHE-PSL <i>CRCAO - Centre de recherche sur les civilisations d'Asie orientale.</i>	Toward Mass Digitization of China's Literary Heritage