Baptiste **Kerleguer**

PhD student in Statistics

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Education

Ecole Polytechnique
PhD in Mathematics

Paris-Saclay, France
Sep. 2019 - Sep. 2022

- Under the supervision of Josselin Garnier and Claire Cannamela
- Multi-fidelity Surrogate models for uncertainty quantifiction in a high dimension context.
- At the Centre des mathématiques Appliquées with funding of the CEA

Ecole Normale supérieure Paris-Saclay (ENS Paris-Saclay)
Master in Mathematics

Paris-Saclay, France
Sep. 2018 - Apr. 2019

- Master Mathématique, Vision, Apprentissage
- Inverse problems for Images, Reinforcement learning, Image denoising, Sub-pixel image processing, Geodesic methods for image analysis, Biostatistics...

Université Paris-Saclay / ENS Paris-Saclay
Master in Computer Science and Engineering

Paris-Saclay, France
Sep. 2016 - Jun. 2018

- Major in computer sciences and applications minor in electrical engineering.

ENS Paris-Saclay
Bachelor of Science

Paris-Saclay, France
Sep. 2015 - Jul. 2016

- Major in Electrical Engineering with minor in Civil Engineering and mechanical Engineering.

Experiences

CEA - DAM
PhD Student

Arpajon, France
Sep. 2019 - Sep. 2022

- Uncertainty quantification research group

CEA - DAM
Intern in Uncertainty Quantification

Arpajon, France
Apr. 2019 - Sep. 2019

- Involved in Uncertainty Quantification for computer experiment team.
- Work on Multi-Fidelity surrogate modeling with Claire Cannamela and Josselin Garnier.

Université de Sherbrooke
Intern in nano-devis simulation

Sherbrooke, Canada
May 2017 - Sep. 2017

- Under the supervision of Maxime Darnon.
- I was a part of a simulation/experimentation campaign on quantum dots.

Teaching

Algorithms for Discreate Mathematics
Teaching assistant

Ecole Polytechnique, France
Sep. 2019-Jan. 2022

Bachelor of science 2nd year

Preparation training for engineering program at Ecole Polytechnique
Mathematics teacher

Ecole Polytechnique, France
Jan. 2020-Mar. 2022

Numerical methods for ODEs
Teaching assistant

Ecole Polytechnique, France
Mar. 2021-Jun. 2022

Bachelor of science 3rd year

Communications

Article

2021	**B. Kerleguer (2021),** Multi-fidelity surrogate modeling for Time-Series, arXiv preprint arXiv:2109.113741v1	*In review*

Talks

Sep. 2021	**ETICS Summer school PhD talk,** Multi-fidelity surrogate modeling for high dimension outputs	*Erdeven, France*
Jun. 2021	**UNCECOMP, Technical session,** Multi-fidelity surrogate modeling for time-series outputs	*Streamed from Athens, Greece*
Jun. 2021	**Numerical analysis Summer school 2021 on Multi-fidelity approaches,** with Claire Cannamela	*Paris, France*
Jun. 2021	**Presentation at Journées de statistiques de la SFdS,** Multi-fidelity surrogate modeling for time-series outputs/ Surrogate model combining Gaussian process and Bayesian neural network.	*Nice, France*
Sep. 2020	**ETICS Summer school presentation,** Multi-fidelity surrogate modeling for high dimension outputs	*Oléron, France*
Mar. 2020	**SIAM UQ contributed talk** CANCELLED due to COVID-19**,** Multifidelity Gaussian process metamodel for time-dependant outputs	*Munich, Germany*

Others

2021	**Member of the scientific committee,** Congrès des jeunes chercheurs et chercheuses en mathématiques appliquées	*Palaiseau, France*
2018	**Agregation of Engineering/Computer Science,** 3rd Place	*France*
Since 2009	**Practice of sailing,**	*English Channel and Atlantic Ocean*