

## PhD position

# Mathematics of Neural Networks & Operators for PDEs

📍 Institut Camille Jordan · Université Lyon 1 · France

We invite applications for a fully financed PhD position at the Institut Camille Jordan, Université Lyon 1 (Lyon, France), starting between October and December 2026.

## Project description

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The PhD project involves the design and analysis of neural operator surrogates for linear and nonlinear partial differential equations.

The PhD candidate will work both on the theoretical aspects and on the implementation of the neural architectures introduced. They will investigate the role of neural networks and operators for preconditioning, eigenvalue problems, etc. by combining techniques from numerical analysis, approximation theory, machine learning, and the analysis of PDEs.

## Candidate profile

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We are looking for a highly motivated candidate with:

- A Master's degree in Mathematics or a closely related field.
- A strong background in numerical analysis and PDEs
- Interest in the mathematics of machine learning
- Programming experience; knowledge of python and frameworks such as pytorch/-JAX is a plus

## How to apply

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Interested candidates should send the following documents:

- CV (including contact details of references)
- academic transcripts
- a concise statement describing interest and relevant experience

Applications and informal inquiries can be sent to:  
Prof. Carlo Marcati (✉ [carlo.marcati@univ-lyon1.fr](mailto:carlo.marcati@univ-lyon1.fr))

## Important dates

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- Starting date: between October and December 2026
- Application deadline: June 15, 2026

