

ANGERS UNIVERSITY

Junior Contract Researcher Post-doctoral contract in public law

Category : A

Presentation of the University of Angers

In the heart of a region recognized for its quality of life, the University of Angers, the 3rd largest employer in the region, offers an environment conducive to the development of its staff and students. The UA is a multidisciplinary university, welcoming more than 26000 students spread over 3 campuses and 2 relocated campuses (in Cholet and Saumur). It has 8 components (5 UFR, 1 IUT, 1 internal engineering school and 1 internal business and management school), and 31 federative research units and structures.

Thanks to the many innovative projects it carries out and its openness to the world, the AU allows everyone to evolve in a stimulating environment. Its annual budget is €156 million (including €123 million in payroll). The UA has 1167 teachers and teacher-researchers, 917 administrative and technical staff and nearly 2000 individual contractors and is looking for involved and daring actors. You recognize yourself in this job offer ? Join us !

Contract features:

Starting date: September 1, 2025 (flexible)
Contract duration : 24 months French law work contract
Work quota : 100%
Monthly wage : 2970€
Location : Angers University, LAREMA Laboratory

Name of research project : New Lagrangian Structures from String Theory – NeLaSt2

Description of the research project in which the research activities entrusted to the officer take place:

The aim of this project is to define and study new Lagrangian objects, within the framework of derived symplectic geometry, and to deduce results in traditional representation theory or string theory via topological field theories. We have divided this project into two axes which can be treated independently, but which are motivated by common questions arising from physics.

The first is to study new cohomological Hall algebras (COHAs) built on Lagrangian subvarieties constructed in the framework of derived geometry by Bozec, Calaque and Scherotzke.

The second axis aims to solve a conjecture of Moore and Tachikawa concerning topological field theories (TFTs). The TFT in question is a functor from the category of oriented cobordisms X of dimension 2 to a category of symplectic holomorphic Hamiltonian varieties.

Expected results :

In terms of academic communication, the successful candidate will be required to:

- publish her or his main results in peer-reviewed journals;
- present these through oral presentations at seminars and conferences;
- take part in scientific meetings to exchange ideas with mathematicians from outside the project.

Definition of research activities and tasks to be accomplished:

In addition to advancing his or her own research, the successful candidate will be expected to participate in the activities of this project. He or she will have good communication skills, including the ability to write for publication, present research proposals and results, and represent LAREMA at meetings, workshops and conferences.

Expected skills:

Knowledge :

<u>Know-how</u> :

Soft skills :

- derived algebraic geometry trepresentation theory
- collaborative work

- independent work

- written diffusion - oral communication

- and/or extended TFTs
 - **Qualifications :** <u>PHD degree</u>

Recruitment procedures and contact :

You must submit your CV, cover letter and doctoral degree by mail at : <u>tristan.bozec@univ-angers.fr</u> copy to : <u>recrutement@univ-angers.fr</u> Deadline for applications: January 15, 2025 This job description is available until the closing date for applications. On that date, it will no longer be available on the website.

If needed, your contact for any further information: <u>tristan.bozec@univ-angers.fr</u>



