

JOB. Post-doc. Social and formal philosophy of science (Nancy, FR, project CRISP)

Job description.

In the framework of the interdisciplinary ANR-funded research project CRISP (Addressing the Challenge of Research Integrity in Scientific Practices), the Archives Henri Poincaré (Nancy, France) seeks to recruit a one-year postdoctoral researcher with modeling and programming skills.

Scientific context of the project

The research project CRISP aims to explore the conditions in which institutional action and discourse on research integrity can improve research practices, to anticipate their impact on research practices and organization of research, and to propose recommendations. Inquiries carried out in the framework of the project are expected to be sensitive to the actual structure and dynamics of the sciences, academic disciplines, and the nature of everyday research practices, in all their diversity. See <http://www.crisp.ens.psl.eu/> for more information about the whole research project.

Scientific aim of the postdoc position

Within the above project, the postdoctoral researcher is expected to investigate factors, aspects or contexts that favor or disfavor the detrimental effects of misconduct and questionable research practices, to explore how the individual and collective levels interact with each other, and to provide clues about which relevant policies and policy levers may be adopted to favor research integrity at the individual level and to improve the quality of science at the global level.

Methodology: using formal models of scientific communities

The postdoctoral researcher will contribute to the above aim by using formal models of scientific communities.

Philosophers of science have already investigated plausible models of scientific inquiries and the effects of potential biases in experimental dynamics. The model of experimental inquiry initially developed by Zollman (2010), in particular, is well-studied, appropriate to describe investigation about empirical hypothesis (typically drugs, which is a relevant pick for potential RI violations), and versatile enough to investigate the combined effects of evidence-driven methods, individuals biases, and institutional factors. It has already been used to provide results on the impacts of the connectivity of networks, the benefits of entertaining competing hypotheses in scientific communities, the usefulness of agents who investigate less consensual hypotheses (Rosenstock et al. 2017), or the effects of scientific conservatism (Frey and Šešelja, 2019). Overall, it seems suited to investigate the collective effects of RI violations. Relevant results have already been produced by Holman and Bruner (2015, 2017), for example about the effects of intransigent agents in communities of truth-seekers or about the impact of funding sources.

To reach the scientific aim described above, the postdoctoral researcher is expected either to build on the above Zollman et al. framework, or on different kinds of models (not necessarily coming from philosophy). The project is open on this point, and this issue can be discussed in the interview (if the candidate has some ideas on this point) or at the beginning of the position.

Profile of the candidate and description of the position

The successful candidate must have obtained a Ph.D. (or expect to have obtained their Ph.D. by the time the post commences), and their profile should match one of the following two:

- a philosopher of science or social epistemologist with modeling and programming skills,
- a computer scientist or applied mathematician familiar with agent-based simulations and interested in the modeling of human and social interactions.

Across all profiles, a strong international publication list is highly appreciated, and so is a willingness and ability to work in interdisciplinary collaborative research projects. The knowledge of a particular programming language is not required.

Language: Knowledge of English is required. Knowledge of French is not.

Duration: 12 months. Starting date is flexible, in September 2021 or later in 2021-2022, to be discussed.

Salary: Net monthly salary: 2200€. In the French System, benefits are paid by the employer (in particular national health insurance, which covers main medical costs for the worker and direct family; unemployment benefit after the position; pension benefits). The gross monthly salary is 2650 € and the total cost for the employer is roughly 54 k€.

Place: The recruited postdoc will be affiliated to the Lorraine partner of the project (Archives Poincaré, Nancy, France) and under the scientific supervision of Dr. Cyrille Imbert (Archives Poincaré, Nancy, France) and Thomas Boyer-Kassem (MAPP, Poitiers, France), within the ANR project CRISP led by Pr. Stéphanie Rupy (ENS, Paris, France).

The CRISP project offers a vibrant and scientifically tailored context to carry out this project. It includes philosophers of science and scholars working in behavioral economy, sociology, psychology, and law. See <http://www.crisp.ens.psl.eu/> for more details.

The postdoc is expected to present and discuss their work with the relevant seminars and workshops organized within CRISP. Investigations will be carried out in collaboration with Cyrille Imbert and Thomas Boyer-Kassem.

For informal inquiry, please write to Cyrille.Imbert@univ-lorraine.fr.

How to apply

Applications should be made online via the CNRS employment platform (<https://bit.ly/2Sl0sO5>).

Deadline for applications: June 8, 2021.

Please include:

- a CV;
- a letter of interest (max 1 page): Briefly state why you are interested in joining the project, briefly describe your research accomplishments, your areas of expertise and technical skills,
- a short research statement/project (max 2 pages): describe how you intend to contribute to the project and to what extent your expertise is well-suited to it. Depending on either your

philosophy or computer science background, you can insist more on links with existing literature, or modeling hypotheses, or coding.

- a published or unpublished scholarly paper, or dissertation chapter, that best represents the quality of your work (it need not be directly linked to the present project);

Short-listed candidates will be invited to online interviews conducted by the steering committee of the CRISP project shortly after the closure of the call, and final decisions will be made before the end of June.