The project Integrating Spectral and Geometric data on Moduli Spaces (**InSpeGMoS**) has been awarded an **Advanced ERC Grant** by the European Commission. This funding allows to hire several post-doc researchers, and in particular applications are open for two-year positions for 2025/27. The selected post-doc will join the Institut de Recherche Mathématique Avancée (IRMA, Université de Strasbourg), in the Analysis group. Applications by recent PhDs are welcome and should be sent to the PI at the address <u>anantharaman@math.unistra.fr</u> with the subject *InSpegMos post-doc* by December 20th, 2024. Interviews of the short-listed applicants will take place in January or early February 2025, and will come out with a ranking. The first ranked applicant will be contacted with a post-doc offer soon after.

- **Research topics:** InSpeGMoS is focussed on the geometry and spectrum of random objects (specifically, hyperbolic surfaces and discrete graphs). The central object of study is the Weil-Petersson measure on the moduli space of compact hyperbolic surfaces. The overall goal is to develop new integration techniques that will allow to study geometric and spectral data of random hyperbolic surfaces, with an aim to establishing limit theorems. The project involves various branches of mathematics (geometry, probability, analysis, spectral theory...) We welcome applicants with various backgrounds, provided they are willing to learn other topics. We will particularly appreciate applicants with a strong background in Teichmüller theory / hyperbolic geometry / spectral geometry / random geometry / study of random graphs and random matrix models. Details on the research program can be found on https://irma.math.unistra.fr/~anantharaman/inspegmos.html
- **Duration:** the post-doctoral contract will be established for a first period of 12 months, starting in the fall 2025 (start date is negociable), to be renewed for an additional 12 months. Candidates preferring a much later starting date and/or a shorter duration are encouraged to explain this in their application.
- Eligibility: holding a PhD at the starting date of the contract, obtained no more than 4 years before.
- **Salary:** salary will be adjusted to the experience of the selected researcher. For newly defended PhDs, the loaded gross monthly salary will be of approximately 4000 euros (i.e. before social contribution and income tax corresponding to approximately 2200 net salary).
- **Teaching duties:** the position comes with no teaching load. The selected postdoc can apply for teaching assignments, if approved by the employer. Such a teaching is paid extra and is fully optional. Classes are usually given in French.
- **Research funds**: the successful applicant will be entitled to use 4000 euros/years for visits, invitations, and research-related expenses.
- **Application:** please send by email a CV (2 p. max.), a list of publications, a research statement (2-7 pages) and a cover letter. The cover letter should contain the proposed dates for the postdoctoral contract, and the contact details of three scholars for reference purposes.