

# PhD position, Semiclassical approach to the solution of the Helmholtz equation

Inria University Cote d'Azur | Sophia-Antipolis, France

The Atlantis team at [Inria centre of University Cote d'Azur](#), France invites applications for a fully funded PhD studentship to work on the project " Semiclassical approach to the solution of the Helmholtz equation".

The aim of the project is to develop new methods to solve Helmholtz equation in the regime of high numerical frequencies. These methods are inspired by theoretical considerations of semi-classical analysis and wavelet theory.

A Bachelor degree in Mathematics is required and a Master degree to be validated before the start of the PhD. Ideal applicants should have a good background in analysis (Fourier transform, Sobolev spaces, distributions...) as well as basic knowledge in numerical analysis (finite element methods...) and ideally (but not mandatory) spectral theory or skills in numerical implementations would have advantages.

A brief remunerated internship (which can be part of the completion of the Master degree) can be done in this project, if needed, even prior to the start of the PhD.

The studentship covers fees and stipend for three years with an additional attractive package. Interested candidates should send their CV with a brief statement of interest, before 30<sup>th</sup> April to [Theophile.Chaumont@inria.fr](mailto:Theophile.Chaumont@inria.fr) , [Maxime.Ingremeau@univ-cotedazur.fr](mailto:Maxime.Ingremeau@univ-cotedazur.fr) [work@victoritadolean.com](mailto:work@victoritadolean.com).