Research and production residency
CALL FOR PROJECTS FROM DOCTORAL STUDENTS AND RESEARCHERS

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\begin{align*}
(i) & \quad \rho_* (\partial_t v_* + (v_* \cdot \nabla) v_*) + \nabla \cdot p_* = \frac{1}{\text{Re Sc}} \Delta_{x_*} \rho_* , \\
(ii) & \quad \rho_* (\partial_t v_* + (v_* \cdot \nabla) v_*) + \nabla \cdot p_* = \frac{1}{\text{Fr}^2} \rho_* g_* + \frac{1}{\text{Re}} \text{Div}_{x_*} (\mu_*(\rho_*) (v_*)) \\
& \quad + \frac{1}{\text{Re Sc}} v_* - \nabla_{x_*} v_*^T \nabla_{x_*} \rho_* ,
\end{align*}
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Le Fresnoy - Studio National des Arts Contemporains is calling for applications from researchers interested in working on a project related to their research interest in an artistic environment that offers advanced audiovisual production tools.

Over the past ten years, Le Fresnoy has undertaken a number of initiatives to bring artists and scientists closer together (in particular: technological support of student/artist projects by research laboratories; creation of mixed arts/sciences research group, exhibition at the Palais de Tokyo, symposium at the Collège de France on “The Dream of Forms”, etc.). This will be the third consecutive year for this residency which is part of the efforts taken by Le Fresnoy to bring together artists and scientists and contributes to the prefiguration of an extension project for Le Fresnoy, both in its buildings and in its activities.

The chosen project will be scientific, or involve questions that touch on scientific concerns. The researcher will follow the same courses as Le Fresnoy artist/students and enjoy the same production resources for their project.
CONTEXT AND GOALS

While the main forum for scientific research is specialist publication, in some cases such research also involves the creation of objects or devices that, rather than simple illustrations or by-products, are an integral part of the research process itself: the construction of a machine, say, or of an experimental apparatus to be used for an experiment or empirical study, the invention of a new technique, the experimental demonstration of the new properties of a material, or again the use of audiovisual equipment for the purposes of testing, recording or demonstration.

The history of the sciences shows just how varied these developments can be: chronophotography, fluid dynamics, the discovery of Kevlar, holography or X-rays, ethnographic films based on visual anthropology, films in ethology (study of human and animal behaviours), psychology or psychiatry, the empirical study of dune formation, mathematical models taking the form of didactic sculptures, evocative animal robots created by the first cyberneticians, the visual modelling of mass data and its manipulation, sonifying the genome in order to discover genes, notebooks of botanical observations, or drawings used to prefigure a standard for the visual representation of proteins, environments for ecological or economic simulations, etc.

Scientific inventions often require their own specifically created technical solutions or ones that are outside industrial norms. They are the manifestation of a technical ingenuity that is often fairly close to the way artists and audiovisual creators go about their work. The spectacular evolution of technologies for the production of images and sounds (infographics, speech synthesis, augmented reality, etc.) can be harnessed to scientific processes and research. Often, indeed, the dialogue with artists offers scientists perspectives that the concentration on their specific objects and research subjects had not revealed.
CONTEXT AND GOALS

The aim of this project at Le Fresnoy is to place these practices, built primarily around scientific questions, in an artistic context. This new host environment will enable the chosen researcher to explore the aesthetic and narrative dimensions of their work and to test the efficacy of its transposition into a communicative language with young artists and with a non-scientific public.
CANDIDATE REQUIREMENTS

This residency is intended for scientific researchers working in a laboratory and for doctoral students in the sciences, in any discipline (physics, chemistry, biology, anthropology, archaeology, medicine, geology, psychology, sociology, human and animal ethology, mathematics, astrophysics, etc.)

Candidates must be aged under 35 and be able to demonstrate their research credentials (affiliation to a research laboratory, academic publications) and ensure that they will be free of their professional activities for the duration of their residency, or, failing that, will be able to continue those activities within the context and facilities offered by Le Fresnoy.

They will, preferably, be able to be permanently present at Le Fresnoy for the first three months of the school year (October to December), which is when most of the teaching is concentrated.

The chosen candidate will in effect have access to the complete teaching programme, and will participate in the same way as the other students. The only difference should be the (scientific) nature of their production.

The candidate will be attributed the sum of 8,400€ to be used exclusively on their project (remuneration of technical or artistic collaborators, technical production costs, etc.). They will also enjoy free access to all production and postproduction equipment at Le Fresnoy, with support from a professional production technician.
SELECTION PROCESS

The candidate will be selected by a jury comprising scientific researchers and members of the team at Le Fresnoy, represented in equal numbers.

Applications must include the following:

- a description of the project (3 pages maximum) specifying the period required for the work.
- visual documentation of earlier research work.
- a CV
- a letter setting out the candidates’ interests and motivations.

Applications should be emailed to: appel_scientifique@lefresnoy.net
or with the online form on the website of Le Fresnoy.

A confirmation of reception will be returned.

For any further information please email Anaïs Caquant (same address) or call her on 03 20 28 38 53.
CALL FOR PROJECTS
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CALENDAR

28 February 2020 / deadline for applications

Early April 2020 / jury deliberation and communication of results

October 2020 – June 2021 / programme and working calendar integrated into the university year (to be finalised with the chosen candidate)
Teaching at Le Fresnoy-Studio National des Arts Contemporains is geared to the production of creative work using professional technologies and with the guidance of eminent artists in a broadly multidisciplinary context.

While the founding culture of the work is that of visual languages (more specifically: photography, cinema, video), the two-year course is also very open to the languages and technologies of the digital arts over a wide spectrum.

Further, productive work is linked to exploratory intellectual work (history, theory, criticism), thanks to regularly organised cycles of conferences, cinematographic programmes, discussions, symposia and workshops.