

## **ILANCE Internships** Spring / Summer 2025

University of Tokyo <a href="https://ilance.cnrs.fr/">https://ilance.cnrs.fr/</a>

The Franco-Japanese laboratory, dedicated to the physics of the two infinities, benefits from an exceptional scientific and cultural environment.

An on-site laboratory in Japan, ILANCE brings together researchers, students, post-docs, engineers and technicians from CNRS and Japanese institutions. The laboratory is made up of French scientists for long-term stays in Japan and Japanese physicists. Individual research grants are awarded for postdoctoral stays or doctoral thesis. The laboratory will also aim to welcome and support French scientists for temporary stays in Japan. Based on the Kashiwa campus in the northeast of the city of Tokyo, the ILANCE laboratory permanently hosts scientists from CNRS laboratories and from four departments of the University of Tokyo namely, ICRR, Kavli IPMU, ICEPP and the School of Science.

## **Statistical Study of Giant Molecular Clouds in Galaxies**

In this topic, we will utilize extensive imaging spectroscopy datasets of galaxies in the local universe, such as M83, to study a large number of giant molecular clouds (GMCs). GMCs are considered the birthplace of massive stars within galaxies. Our investigation will focus on the physical and chemical properties of GMCs using rich ALMA imaging spectroscopy data sets of various molecular lines to understand the underlying physical processes that govern their evolution. This, in turn, will provide insights into the regulatory mechanisms affecting the overall evolution of galaxies.

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