Postdoctoral Position in Galactic Archaeology

We invite applications for one postdoctoral position at **the Bordeaux Laboratory for Astrophysics, France**, to work on the characterisation of old Galactic stellar populations.

The successful candidate will join the research team led by **Dr N. Lagarde** and work on **PRIMA** (*PRobing the origIns of the Milky WAy's oldest stars*), a project funded by the **French National Research Agency (ANR)** and the **Swiss National Science Foundation (SNSF)**. PRIMA is an international collaboration with a team led by **Prof. C. Charbonnel** at the **Department of Astronomy of the University of Geneva, Switzerland**.

PRIMA focuses on the **Galactic structures hosting the oldest stars of the Milky Way,** namely the **halo, thick disc, and globular clusters (GC),** which are key tracers of the Galaxy's **merger history**. The project employs **stellar population synthesis models** to simulate the present-day stellar content of the Milky Way, combining **state-of-the-art stellar evolution models** with Galactic formation scenarios. By comparing simulated mock catalogues with **multi-wavelength survey data**, including Gaia data combined with spectroscopic and asteroseismic constraints, PRIMA offers a unique perspective on Galactic evolution. Unlike other approaches, it eliminates selection biases in data analysis and accounts for internal stellar processes that alter chemical abundances and impact stellar lifetimes. The project aims to disentangle in situ and ex situ origins of old stars and to assess the effects of mergers and secular evolution (e.g., radial migration) on Galactic stellar populations, including globular clusters and their escaped stars.

The postdoctoral researcher based in Bordeaux will focus on **characterising and dating merger events in the halo and thick disc**, using the **Besançon Galactic Model (BGM)**, a well-established Galactic stellar population synthesis tool. We seek a **highly motivated** and **creative** researcher capable of developing new strategies to interpret Galactic surveys and correct for selection biases to better understand the oldest stellar populations of the Milky Way. We welcome applications from candidates with expertise in **observational, theoretical, or computational astrophysics**, particularly in the fields of **stellar and Galactic evolution**. The ideal candidate has a good knowledge of English and solid programming skills. We treasure diversity in the Prima collaboration and strive to foster an inclusive, collegial, and supporting environment where anyone can feel welcome and valued regardless of background or identity.

Position Details

- **Duration:** 2 years
- **Starting Date:** Autumn 2025 (flexible within reasonable limits)
- **Location:** Laboratoire d'Astrophysique de Bordeaux, University of Bordeaux, France
- **Benefits:** Full health insurance and social security coverage (as per French law)
- **Funding:** Support for travel to international conferences and collaborations

Application Process

Applicants should submit the following documents in a **single PDF file**:

1. **Curriculum Vitae** (including a list of publications);
2. **Research statement** (max. 4 pages) outlining past achievements, research interests, and envisioned contributions to PRIMA;
3. **PhD diploma** (or an official statement confirming its expected completion date).

Additionally, at least **two letters of recommendation** should be sent directly by the referees.

Send all applications and information requests to nadege.lagarde@u-bordeaux.fr**.** The review of applications will start immediately and will continue until **May 31, 2025** or until the position is filled. The hiring process and the working relationship will adhere to the principles of diversity and inclusion upheld by our parent institutions.