

One-year grant Research Grant (BI) in 2023/2024

Project **Plasma Surface Interaction (Data and Tools) COupled Modelling (PSI.COM)** studies how to use plasmas to produce fertilizers !

The project comprises several exciting endeavours:

- (i) the **study of N_2-H_2 plasmas and the catalytic production of ammonia**, using an interplay between modelling and diagnostics to understand the volume + surface kinetic paths, and to validate and reduce the kinetic scheme;
- (ii) the **development and the consolidation of the LisbOn Knetics (LoKI) tool suite**, aiming at full time-dependent description, and including Machine Learning tools for sensitivity analysis;
- (iii) the contribution to the **development of a high-performance open-access data-storage library for LoKI**, in association with the LXCat stakeholders.

You can develop some of the previous tasks with a **one-year Research Grant** (Bolsa de Investigação - BI) in 2023/2024, preferentially at MSc level (2nd cycle).

The work can lead to a **PIC2/Master dissertation** (proposal 29172 for MEFT).

The work will be developed at

- group N-PRiME of Instituto de Plasmas e Fusão Nuclear – IPFN, IST
- Laboratoire de Physique des Plasmas – LPP, Ecole Polytechnique (Paris, France)

Interested ? Want more information ?

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and check the QR code

