



One-year grant Research Grant (BI) in 2024/2025

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 N₂-H₂ 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, optimization and consolidation of the LisbOn Kinetics (LoKI) tool suite**, aiming at full time-dependent description, and including Machine Learning tools for chemistry reduction;
- (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 2024/2025, preferentially at MSc level (2nd cycle).

The work can lead to a **PIC2/Master dissertation** (proposal 32808 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 (see the “Positions” tab)

