

## **Development of a magneto-optical trap with laser ablation**

We have recently developed a new system for laser cooling and trapping of atoms. It is a single and compact design where the atomic vapour is generated thanks to laser ablation. The vapour is then trapped and cooled in a magneto-optical trap.

The objective of this FYP project will be to improve the current design. In particular the vapour source, and the ablation sequence for a robust and reliable operation.

The applicant should have a strong motivation for experimental physics involving optics, and vacuum system.

See: Chung Chuan Hsu, Remy Larue, Chang Chi Kwong, and David Wilkowski, Laser-induced thermal source for cold atoms. [arXiv](#)