# **FICHE PROJET**

# MILAN2

During the MILAN2 collaborative project, LIST and VAONIS will collaborate for the design and development of cutting-edge AI-powered techniques to process astronomical images.



# Inspiration

Nowadays, professional and amateur astronomers can benefit from Electronically Assisted Astronomy (EAA) to observe the night sky and capture data for hundreds of faint celestial targets, and recent smart telescopes has greatly increased accessibility to this practice.

It is estimated that there are currently one million astrophotographers in the world, with several tens of thousands already equipped with a smart telescope in 2024. This figure is set to grow significantly in the months and years ahead, driven by ongoing technological advances.

In this domain, post-processing is always required to improve and analyze astronomical images: whose quality may be affected by several external factors, including weather conditions (wind, humidity, high altitude clouds), light pollution, and the presence of undesired artefacts due to constellations of satellites.

As background, the recent and successful MILAN project (FNR Bridges, 2021-2023) has led to an AI-powered toolbox to process high-resolution astronomical images, and the underlying technologies rely on validated and patented technologies.

## Innovation

During the MILAN2 collaborative project, LIST and VAONIS will continue to collaborate for developing AI-powered image processing techniques to be used on low-resources devices.

#### Impact

MILAN2 aims at delivering cutting-edge and easy-to-use solutions to improve the quality of astronomical images without deep knowledge in image editing. This will make astronomy and astrophotography even more accessible to as many people as possible.

### Partenaires Vaonis

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