

# **Competence Center in Monitoring and Control (CCMC)**

F. Neves

LIP Advisory committee meeting

27 April 2023



# Synopsis:

## Who we are, what we do and activity highlights

### LIP Contributors:

Nuno Barros, Francisco Neves (Coord.), Guilherme Pereira (**60% FTE**), João Silva, Vladimir Solovov, Filipe Veloso, Helmut Wolters.

### Master Students:

Rita Barradas, Carlos Neto (**AST**), João Parente (**MARE-ECOTOP**), Jose Rodrigues (**Bosch Termotecnologia, Aveiro**), Francisco Santos (**TheLOOP**).

- ✓ Brings together both the **expertise** and **human resources** from several LIP groups (ATLAS, DUNE, LZ, IT) and uses the accumulated know-how and tools to **establish partnerships/contracts with third parties** (e.g. other laboratories, industry) where the LIP scientific deliverables can be reused;
- ✓ Shares and helps implementing solutions among other LIP groups; Training of human resources.

### Highlights from 2022 (-2023):

- ✓ **Project “MonNest - Nest Monitoring”** (partnership with MARE-ECOTOP), funded by the Technology Transfer Office of the University of Coimbra (~5k€, INOVC+ Ignition Project and Proof of Concept);
- ✓ Supervision of 5 **Master** students (3 in collaboration with Industry);
- ✓ Development of **outreach instruments** (Cloud Chamber);
- ✓ Participation in the 2022 Summer **Internship Program** for undergraduate students at the LIP+UC with 2 projects (6 students);
- ✓ Dedicated personnel (60% FTE) for **market prospection**, production of a portfolio, etc.



# Objectives for the future & SWOT

## Objectives & Prospects for the future (2023-)

- A contract is being negotiated (*advanced stage*) with **First Rare Materials Company** for the production of a Multi Channel Analyzer (135k€, 9-10 months, 2.5 FTEs);
- The participation in a project (European funds + automotive industry) for H<sub>2</sub> storage is being evaluated/negotiated (preliminary stage). The LIP participation would be centered on the monitoring and control instrumentation;
- Continue to seek out for **new funding opportunities** with current/new partnerships in industry and academia.
- Continue to invest in the **training of human resources** and development of dissemination activities;

## SWOT

### Strengths

- ✓ A large body of knowledge available (e.g. analysis, software, electronics);

### Opportunities

- ✓ The ability to deploy very **high quality and personalized** products and services;

### Weaknesses

- × Difficulty in **allocation of FTEs or resources**;

### Threats

- × The ability to **meet deadlines** and ensure the **manpower** required;