



## General information

**Organisation name :** *Université Grenoble Alpes / CEA*  
**Contact name :** *Boris Brun-Barrière*  
**Email address:** *boris.brun-barriere@cea.fr*

## Targetted topics:

HORIZON-CL4-2024-DIGITAL-EMERGING-02-02: Stimulating transnational research and development of next generation **quantum technologies**, including basic theories and **components**



# Project idea

## 1. Describe your project idea /TOPIC ID: HORIZON-CL4-2024-DIGITAL-EMERGING-02-02

- a. Develop novel bolometers in the microwave domain from 2D materials (e.g. germanium)
- b. Apply these novel detectors to benchmark qubits readout and single-photon detectors

## 2. Complementary skills you need in your consortium/project

- a. Single micro-wave photon sources development
- b. Superconducting qubit readout benchmarking (bolometric vs amplification approach)