RobustSuperQ – Job offer

1-year mission for Nanofabrication Engineer or Post-doc

Development of Microwave bridge for Quantum Circuits

Bridges are essential in planar microwave quantum circuits because they allow two different microwave lines to cross each other and/or two different ground electrodes to be well re-connected together, with minimal series inductance, capacitance to ground, and losses and reflection of the microwave signals passing the bridges.

The mission consists in:

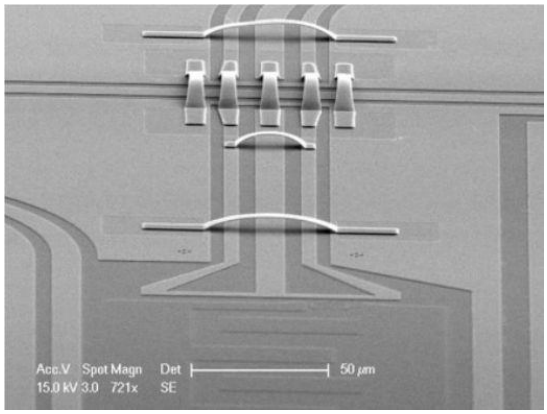
- Evaluating experimentally the microwave losses of different insulating materials below 300mK
- Designing and simulating air or dielectric bridges using 3D microwave simulators
- Developping in cleanroom one or several reliable processes for robust microwave bridges
- Characterizing them at temperature below 1K
- Disseminating the process among the different quantum French labs by a good documentation and by visiting these labs.

at CEA-University Paris-Saclay, SPEC, Quantronics group

Hiring process starting immediately (takes 2 months)

Candidate must have skills in microwave simulation, low temperature microwave measurement, and very good skills in microfabrication in cleanroom

Please apply by sending your application to denis.vion@cea.fr
With *CV and a short message telling your situation and your motivation*



PROGRAMME ET EQUIPEMENTS PRIORITAIRES DE RECHERCHE QUANTIQUE

QUANTUM ELECTRONICS GROUP

FRANCE QUANTUM BASIC RESEARCH PROGRAMME

https://www.robustsuperq.fr