**ZEISS Quantum Challenge Template and Information**

**Information**

-Only proposals with all required information filled in will be considered.

-Do not exceed the strict limitation of 3750 words (abstract + introduction + main + summary).

-Start a new page after “names and affiliation of all participations”

-The affiliation should be your current institution or work place

- Highlight in bold font the corresponding author

**Title of your Proposal**

1. **Corresponding Author Name**, Affiliation Name, Postal Address, author.name@affiliation.com
2. Author Name, Affiliation Name, Postal Address, author.name@affiliation.com
3. …

Problem Statement: Which of the six problem statements are you tackling with this proposal

ZEISS Quantum Challenge

ABSTRACT: Short abstract of 250 words

INTRODUCTION Use the introduction to get us excited about your proposal. Briefly describe your idea (which technology you would use to tackle the problem), compare it to the established solutions and let us know about the current state of the technology. Use the introduction to answer the questions below. Please note, you don’t have to justify or prove your statement during the introduction. Use the Main-Section to elaborate on the statements you made during the introduction.

Idea of your proposal:

* Which technology do you want to use to solve the problem at hand?

**Comparison to established solutions**:

* What are the advantages/ disadvantages of your proposal as compared to the established solutions?
* Why do you think that those advantages are relevant for the application? [If we already stated in the problem description on our webpage that a particular feature is required you don’t have to justify it again]

**Current state of the technology:**

* What is the associated technology risk (For example if it is a technology which is already used somewhere else but not for this application, the technology risk is relatively low. If the basic components to make it work are already available and you just have to test it is a technology with medium risk. If it requires substantial research efforts also on the component level the technology risk is high (e.g. you need detectors which are not yet available).)?
* What is the current status of the technology (theoretical proposal or has it already been demonstrated experimentally)? You may wish to use the NASA TRL scheme: <https://esto.nasa.gov/files/trl_definitions.pdf>
* Are there already publications on this technology?

MAIN Use this section to elaborate on the statements you made during the introduction. For example, if your proposed technology is completely new and not published anywhere else, use this section to motivate why it works and why it has the features you mentioned during the introduction. If there is literature available, which you can use to corroborate the statements you made during the introduction, just reference it. For us it is important to assess the technology risk. So it is beneficial if you would use this section to underpin your assessment of the technology risk you made in the introduction.

Summary Short summary of 500 words