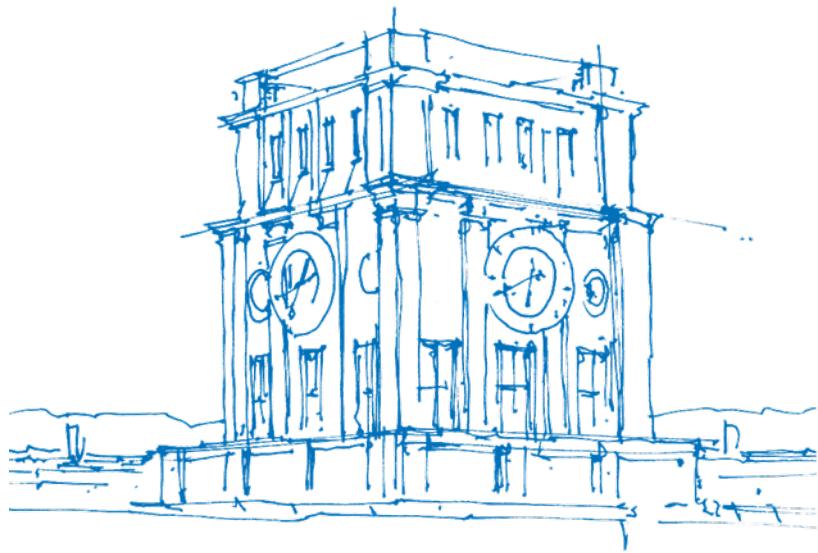


QCCD: Fusion of Quantum Computing and Compiler Design

Yannick Stade, Yanbin Chen



TUM Uhrenturm

The Project

- Part of Munich Quantum Valley

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- Goal: Design a hybrid programming language

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- Approach: Build on C (reason: HPC, library support)
 - Split the hybrid code into classical and quantum code
 - Both parts interact during runtime with each other

The Course

- Mo and Fr, 9:00 - 12:00 (partially voluntary working time)

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- Presentation of results every 2-3 weeks

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- Incorporate preprocessing directives such as

Grading

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- at least one oral contribution as part of the presentations

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- at least one oral contribution as part of the presentations
- home exam (written report) including some questions on intro lectures

Application and Admission

- Proof of required knowledge

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- Proof of required knowledge
 - Written presentation of yourself containing
 - Your name and your TUM mail address
 - Your background
 - Relevant knowledge that you bring into the project
 - Your areas of interest with respect to the project
 - Areas where you would like to challenge yourself
 - One "fun fact" about yourself
- ⇒ In the course you will add a photo to it and it will be available to all students in the course

Further Informations

Go to: I2 > Teaching > WT 22/23 > Pratika > Fusion of...

<https://www.cs.cit.tum.de/pl/lehre/wintersemester-22-23/praktika/fusion-of-quantum-computing-and-compiler-design/>