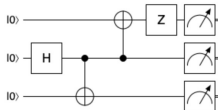
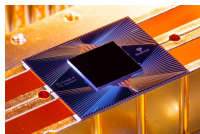


Quantum Information & Computation (Winter 2023/24)



- ▶ what are *quantum bits* and *circuits*?
- ▶ how to design *quantum algorithms* that break RSA & Diffie-Hellman?
- ▶ are NP-hard problems also *difficult* for quantum computers?
- ▶ why is it *good* that we *cannot clone* quantum bits?

Quantum information & computation will give a friendly intro to this new frontier of computer science, which has generated a lot of excitement.

Highlights: Simon, Shor factoring, Grover search, quantum money, . . .

No physics needed – but you might get to know some friendly physicists ☺