



Qiskit Research (getting started):

https://github.com/qiskit-research/qiskit-research/blob/main/docs/getting_started.ipynb

References:

- Quantum Computers Review: T Ladd *et al*, *Nature* **464**, 45 (2010)
Defects in transmon qubits: J Lisenfeld *et al*, *npj Quant Info* **5**, 105 (2019)
Quantum Engineer's Guide to SC Qubits: P Krantz *et al*, *Appl Phys Rev* **6**, 021318 (2019)
DRAG pulses: F Motzoi *et al*, *PRL* **103**, 110501 (2009)
Virtual Z gates: DC McKay *et al*, *PRA* **96**, 022330 (2017)
Echoed cross resonance: S Sheldon *et al*, *PRA* **93**, 060302(R) (2016)
Rotary echoes for CR gates: N Sundaresan *et al*, *PRX Quantum* **1**, 020318 (2020)
Majorana braiding / pulse scaling: JPT Stenger, **NTB**, *et al*, *Phys Rev Res* (2021)
Ising quench / error suppression: Youngseok Kim *et al*, *Nat Phys* (2023)
Readout error mitigation Paul Nation *et al*, *PRX* (2021) & Ewout van den Berg *et al*, *PRA* (2022)
Future of quantum computing with SC qubits: S Bravyi *et al*, *J Appl Phys* **132**, 160902 (2022)

Nicholas T Bronn
ntbronn@us.ibm.com