

## Material Complementar

### Fundamentos da Computação Quântica:

- NIELSEN, Michael A.; CHUANG, Isaac L. Quantum computation and quantum information. Cambridge university press, 2010.
- NAKAHARA, Mikio; OHMI, Tetsuo. Quantum computing: from linear algebra to physical realizations. CRC press, 2008.

### Entendendo átomos neutros:

- NAKAHARA, Mikio; OHMI, Tetsuo. Quantum computing: from linear algebra to physical realizations. CRC press, 2008. (cap. 14)
- Whitepaper QuEra Aquila:  
[https://cdn.prod.website-files.com/643b94c382e84463a9e52264/648f5bf4d19795aaf36204f7\\_Whitepaper%20June%2023.pdf](https://cdn.prod.website-files.com/643b94c382e84463a9e52264/648f5bf4d19795aaf36204f7_Whitepaper%20June%2023.pdf)

### Íons aprisionados:

- FERNANDES, Gabriel PLM et al. Íons Aprisionados como Arquitetura para Computação Quântica. Revista Brasileira de Ensino de Física, v. 45, p. e20220218, 2022.
- NAKAHARA, Mikio; OHMI, Tetsuo. Quantum computing: from linear algebra to physical realizations. CRC press, 2008. (cap. 13)
- Imagem do atomo aprisionado:  
<https://www.ox.ac.uk/news/science-blog/image-strontium-atom-wins-national-science-photography-prize>

### Redes Neurais:

- Digital-analog quantum convolutional neural networks for image classification.  
<https://arxiv.org/pdf/2405.00548>
- Quantum Machine Learning: arXiv:1611.09347v2
- An introduction to quantum machine learning: arXiv:1409.3097v1
- RONCALLO, Simone et al. Quantum optical classifier with superexponential speedup. arXiv preprint arXiv:2404.15266, 2024.

### Problemas de otimização:

- LUCAS, Andrew. Ising formulations of many NP problems. Frontiers in physics, v. 2, p. 5, 2014.

### Telecomunicações:

- V. Krutyanskiy, M. Canteri, M. Meraner, J. Bate, V. Krcmarsky, J. Schupp, N. Sangouard, B. P. Lanyon. **Telecom-Wavelength Quantum Repeater Node Based on a Trapped-Ion Processor**. Physical Review Letters. Vol: 130, 213601. DOI: 10.1103/PhysRevLett.130.213601

- STOLK, Arian J. et al. Metropolitan-scale heralded entanglement of solid-state qubits. arXiv preprint arXiv:2404.03723, 2024.

Simulações:

- IQBAL, Mohsin et al. Non-Abelian topological order and anyons on a trapped-ion processor. Nature, v. 626, n. 7999, p. 505-511, 2024.
- Whitepaper D-Wave:  
[https://www.dwavesys.com/media/knedq0pb/dwave\\_life-sci\\_overview\\_v2.pdf](https://www.dwavesys.com/media/knedq0pb/dwave_life-sci_overview_v2.pdf)

Whitepaper avanços da microsoft:

[https://smt.microsoft.com/White Paper Accelerating scientific discovery with HPC AI and Quantum.pdf](https://smt.microsoft.com/White_Paper_Accelerating_scientific_discovery_with_HPC_AI_and_Quantum.pdf)

Figurinhas dos slides: <https://www.flaticon.com/br/autores/tomomi-the-cat/lineal-color>