

## Chapter 13: The Quantum Fourier Transform

This section is already in the book plan, but it has not been written fully yet. The book owner can press Generate section to write this part with the language model connected to TheoryTrace.

Section plan:

Introduces periodicity, roots of unity, and the quantum Fourier transform as a central tool in quantum algorithms. Students learn the circuit structure, the intuition behind phase estimation, and why Fourier methods reveal hidden patterns.

### References

References will be added when this section is generated.

# Document information

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