

# Mathematical Foundations for Quantitative Trading

Fundamental mathematical concepts for quantitative finance.

1. Probability Theory
2. Statistical Inference
3. Linear Algebra Applications
4. Calculus in Finance
5. Differential Equations
6. Stochastic Processes
7. Time Series Analysis
8. Optimization Theory
9. Matrix Calculations
10. Fourier Transform Applications
11. Information Theory
12. Game Theory in Markets
13. Numerical Methods
14. Simulation Techniques
15. Mathematical Modeling