A–C

Acoustics – wave equations, resonance models

Aerodynamics – Navier–Stokes, lift/drag equations

Algorithmic Theory / Computer Science – complexity theory, logic gates, automata

Anthropology (Quantitative) – statistical lineage, genetic drift

Archaeometry – radiometric dating, decay equations

Astronomy – orbital mechanics, photometry, Kepler's laws

Astrophysics – Einstein field equations, blackbody radiation

Atmospheric Science – barometric, lapse rate, climate modeling

Biochemistry – Michaelis–Menten kinetics, thermodynamic models

Biophysics – membrane potentials, charge diffusion

Chaos Theory – Lorenz attractor, logistic map

Chemistry (Physical/Theoretical) – reaction kinetics, quantum models, stoichiometry

Climatology – radiative forcing, feedback equations

Cognitive Science (Computational) – neural network models, Bayesian inference

Cosmology – Friedmann equations, inflationary models, dark energy estimates

Crystallography – Bragg's law, lattice geometry

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D–G

Decision Theory / Game Theory – Nash equilibrium, utility matrices

Differential Geometry – Riemann curvature, tensor fields

Ecology (Mathematical) – Lotka–Volterra, niche models

Economics – supply/demand curves, utility functions, game theory overlap

Electrical Engineering – Ohm’s law, Fourier transforms, signal equations

Electrodynamics – Maxwell’s equations, Lorentz force

Energy Systems – efficiency, entropy change, conservation models

Environmental Modeling – pollutant diffusion, carbon cycle models

Epigenetics (Quantitative) – methylation frequency equations

Evolutionary Biology (Mathematical) – Hardy–Weinberg, selection coefficients

Fluid Dynamics – Reynolds number, Bernoulli’s equation

Fractal Geometry – Mandelbrot sets, scaling functions

Genetics (Population) – mutation-selection models, recombination theory

Geology (Structural / Geophysical) – seismic equations, plate velocity models

Geophysics – Earth resonance, density layers, gravimetric equations

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H–M

Hydrodynamics – flow potential, laminar/turbulent models

Information Theory – Shannon entropy, Kolmogorov complexity

Linguistics (Formal/Semantics) – syntax trees, probabilistic grammar models

Logic (Mathematical) – propositional, predicate calculus

Machine Learning – backpropagation, loss functions, convergence criteria

Materials Science – stress-strain curves, thermomechanical models

Mathematics (Pure) – group theory, topology, set theory, number theory

Mechanics (Classical) – Newton’s laws, torque, energy conservation

Meteorology – advection equations, storm path modeling

Molecular Dynamics – Lennard-Jones potential, force-field models

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N–R

Neuroscience (Computational/Quantitative) – Hodgkin-Huxley, synaptic models

Nuclear Physics – fission chain reactions, decay curves, mass-energy

Oceanography – wave height equations, salinity transport

Optics – Snell’s Law, lensmaker’s formula, diffraction

Particle Physics – Standard Model, Feynman diagrams, symmetry equations

Pharmacokinetics – dose-response curves, compartment models

Philosophy (Logic, Formal Epistemology) – modal logic, Gödel’s incompleteness

Plasma Physics – Debye length, fusion reaction rate equations

Psychology (Quantitative/Behavioral Economics) – decision matrices, response curves

Quantum Mechanics – Schrödinger’s equation, Heisenberg principle, wavefunction

Relativity – General & Special, Lorentz transformations, spacetime curvature

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S–Z

Seismology – wave propagation, Richter/Moment Magnitude

Sociophysics – opinion dynamics, Ising models

Statistics – distributions, hypothesis testing, confidence intervals

String Theory / M-Theory – higher-dimensional topology, brane math

Structural Engineering – force distribution, load bearing analysis

Systems Theory – feedback loops, entropy regulation

Thermodynamics – entropy, enthalpy, Carnot cycle

Topology – homeomorphisms, knots, manifold spaces

Turbulence Modeling – Kolmogorov scaling, Navier–Stokes turbulence

Virology (Modeling) – infection rate curves, replication dynamics

Wave Mechanics – superposition, harmonic oscillator

Zoology (Quantitative Ecology) – movement modeling, population dynamics