

Index

- AdS/CFT, *see* gauge/gravity duality
- BGK, 50, 61
- Bjorken flow, 13
 kinetic theory, 63
 viscous, 26
- Boltzmann equation, 60
- Borel resummation, 30
- BRSSS, 20, 23
 collective modes, 48
 resummed (rBRSSS), 47
- bulk viscosity, 18
 Borel-resummed, 35
- causality
 fluid speed, 52
 violation, 44
- cavitation, 35, 131
- centrality, 136
- Chapman-Enskog expansion, 65
- Color Glass Condensate, *see* IP-Glasma model
- conformal fluid dynamics, 22
- continuum limit, 89
- Cooper-Frye prescription
 exponential ansatz, 69
 in simulations, 133
 quadratic ansatz, 67
- cosmology, 12
 viscous, 24
- Denicol, Niemi, Molnar, and Rischke (DNMR), 51
- DGLAP, 111
- diffusion, 4
- Einstein relations, 5
- Equation of State (EoS), 11
 Bose-Einstein, 86
 conformal, 23
 kinetic theory, 65
 lattice QCD, 91
 non-equilibrium, 17,
 19, 35
- Euler equation, 11
 collective modes, 40
 event-by-event averaging, 136
- femtoscopy, *see* HBT Radii
- flow
 anisotropic, 137
 elliptic, 142
 radial, 137, 142
 triangular, 143
- fluid dynamics
 action formulation, 54
 anisotropic, 69
 attractor, 33, 35
 breakdown of, 74, 82
 Central Lemma of, 34
 far from equilibrium, 39
 first-order, *see* Navier-Stokes equations
 gradient series, 30
 ideal, *see* Euler equation
 out of equilibrium, 33
 second-order, *see* BRSSS
 third-order, 21
 unreasonable success of, 38
- gauge/gravity duality, 74
- Glauber model, 104
 with partons, 106
- gravitational shock-wave collisions, 117
- Gubser flow, 14
- hadron cascade, 134
- hadronization, *see* Cooper-Frye prescription
- Hanbury-Brown-Twiss (HBT) Radii, 139
- holography, *see* gauge/gravity duality
- hydrodynamics, *see* fluid dynamics
- initial-state eccentricities, 121
- IP-Glasma model, 109, 111
- IP-Sat model, 111
- kinetic theory, *see* Boltzmann equation
- Knudsen number, 29

- Kubo formula, 44
- Kubo-Martin-Schwinger (KMS), 53, 56
- local rest frame (LRF), 10
- Müller-Israel-Stewart theory, 51
- maximal signal speed, 46
- mean free path, 29
- modified gravity effects, 25
- momentum spectra, 136
- Monte-Carlo sampling, 101
- multiparticle correlations, 138
- multiplicity, 136
- Navier-Stokes equations, 21
 - collective modes, 42
- neutron stars, 15
- nonhydrodynamic mode, 33, 40, 47
 - holography, 81
 - kinetic theory, 72
 - simulations, 150
- nuclear thickness function, 100
- numerical algorithms, 123
- particle yields, 140
- pre-hydrodynamic flow, 113, 120
- pseudo-temperature, 36
- rapidity, 135
- relaxation time approximation, *see* BGK
- resurgence, 31
- shear viscosity, 18
 - Borel-resummed, 35
 - lower bound (fluid dynamics), 58
 - lower bound (string-theory), 80
- sound attenuation length, 43, 54
- speed of sound, 12, 42, 91
- switching hypersurface, 132
- transport coefficients, 12, 18, 49, 51
 - free field theory, 86
 - holography, 77
 - kinetic theory, 64
- transverse plane, 100
- vorticity, 27
- Woods-Saxon distribution, 99