

INDEX OF SUBJECTS

- Adiabatic invariant 12, 196
- Ages of asteroid families 203-210
- Area index 191
- Asteroid belt
 - perturbations due to 73-79
- Asteroidal fragments
 - reaccumulated 181
- Asteroids
 - families of 117-122, 177-188, 203-210
 - masses of 180 *et seq*
 - rotational properties of 179
 - stability of 123-136, 137-139, 141-152
 - Trojan 153-161, 165-176
- Asymptotic
 - orbits 339-350
 - trapping 349
- Bifurcation
 - parameter 308
 - theorem 230, 232
 - vertical 213-224
- Capture
 - escape boundary in the collinear restricted problem 325-338
 - of comet P/Boethin 107-114
- Central force field 39-46
- Chaotic
 - behaviour 150, 412, 413
 - cometary orbits 377
- Collision
 - in the anisotropic Kepler problem 266, 267
 - in the collinear restricted problem 326 *et seq*
 - meteoroid 86
- Collisional origin of asteroid families 177-188
- Comet
 - P/Boethin 107-114
 - P/Lexell 105, 106
 - Swift-Tuttle 89 *et seq*
- Comets
 - extinct in high inclination orbits 97-104
- Dynamical systems
 - degenerate 411-415
 - hierarchical 277-287, 303 *et seq*
 - stochasticity criterion of 411 *et seq*
- Earth-Moon system
 - evolution of 4
- Eclipses of Galilean satellites
 - collection of 51-59
 - Delambre collection of 52 *et seq*
- Ejection of particles
 - from comet P/Lexell 105, 106
 - from comet Swift-Tuttle 90, 91
- Elliptical galaxies
 - periodic orbits in 271-274
- Ephemeris
 - long by JPL 47-50
- Equilibrium figures
 - relaxation of asteroidal fragments toward 177
- Equilibrium points
 - asymptotic orbits at 339-350
 - linear stability of 289 *et seq*
 - orientation of satellite located at 27-35
 - periodic orbits about 235-247, 289 *et seq*
- Equipotential curves
 - boundaries for 317-323
- Extinct comets
 - steady state number of 97-104
- Final evolutions
 - in the collinear restricted problem 334 *et seq*

- Four-body problem 107, 158, 159, 309 et seq
- Galilean satellites
 - eclipses of 51-59
- Gauge invariance
 - of parametrization 364
- Grain orbits
 - trapping time of 397-410
- Hierarchical systems 277-287, 303 et seq
- Hierarchy breaking 309 et seq
- High inclination orbits
 - extinct comets in 97-104
- Hill equation 241 et seq, 291 et seq
- Hill stability
 - criterion in general three-body problem 307 et seq
 - of asteroids 123-139
- Homothetic orbits
 - in the anisotropic Kepler problem 266
- Impact experiments
 - for asteroidal collision 178
- Integrals
 - classical 302 et seq
 - disappearance of 411 et seq
- Invariant
 - curves 146-150
 - manifolds 334
- Inverse problem
 - for autonomous systems 353-367
- Kepler problem
 - anisotropic 263-270
 - inverse 358 et seq
 - symmetric periodic orbits in 265
- Kirkwood gaps 141, 149, 163, 189-201
- Level manifolds
 - of classical integrals 302 et seq
- Libration
 - of Saturn's satellites 21
 - period of Trojans 154
 - region of resonant asteroids 400, 408
- Libration of perihelion
 - of Trojan asteroids 165-176
- Libration zone
 - depletion of 199
 - topological 191
- Lunar orbit
 - evolution of 14
- Lunar theory
 - resonant terms of 6
- Measure of instability 145
- Meteor streams
 - computer model of 86, 92
 - orbital evolution of 89-95
 - physical processes affecting the motion of 83-87
- Minor bodies
 - encounters of/ with the outer planets 377-395
- Mirror conditions
 - asymptotic approach to 277 et seq
- Mirror theorem 226, 278
- N-body systems 277-287, 301 et seq
- Non-gravitational forces 84, 100
 - combined with restricted problem 107 et seq, 397-410
- Numerical integrations 15, 47, 68, 92, 98, 100, 105, 107-114, 141-152, 153-161, 249-256, 260, 330 et seq, 347 et seq, 397-410
- Observations
 - computerized reduction of 48
 - of Galilean satellite eclipses 51-59
- Orbital evolution
 - of comet P/Lexell 105
 - of high inclination comets 101
 - of meteor streams 89-95
 - of small bodies in the outer solar system 392
 - of Trojan asteroids 165-176
- Orientation of a satellite
 - located at equilibrium point 27-35
- Outer planets
 - encounters of minor bodies with 377-395

- Perihelion-aphelion exchanges**
 - as a consequence of close encounters 388 *et seq*
- Perihelion of Trojan asteroids**
 - libration of 165-176
 - period of 154
- Periodic orbits**
 - about equilibrium points 235-247, 296 *et seq*
 - asymmetric 249-256
 - bifurcations of 213-224, 225-233
 - characteristics of 271-274
 - construction of 257-261
 - continuation of 143, 144, 225 *et seq*
 - in elliptical galaxies 271-274
 - resonant 143 *et seq*, 235-247
 - stability of 144, 145, 225-233, 253 *et seq*, 257-261
 - three-dimensional 213-224, 235-247, 257-261
 - vertical self-resonant 213, 218 *et seq*, 242, 246
- Perseid meteor stream** 89 *et seq*
- Perturbations**
 - due to asteroid belt 73-79
 - planetary secular 61-71
 - secular on the $c^2 h$ integral 311 *et seq*
- Poincaré map** 328, 330
- Poynting Robertson effect** 84, 397-410
- Quadrantid meteor stream** 92 *et seq*
- Regularization**
 - Belenkii 40 *et seq*
 - in satellite theory 39-46
- Resonance**
 - deep 229
 - evolution through 191 *et seq*
 - fundamental model of 189, 190
 - Jupiter-Saturn 158
 - of comet P/Boethin with Jupiter 107 *et seq*
- parametric** 30
- secular of Trojan asteroids** 160
- shallow** 227
- with tidal terms in Lunar theory** 9
- Resonances**
 - among Saturn's satellites 19-25
 - in the evolution of the Lunar orbit 3-17
 - width of 400
- Resonant**
 - asteroid orbits 141-152, 163
 - orbits in presence of Poynting-Robertson drag 397-410
 - periodic orbits 143 *et seq*, 235 *et seq*
- Satellite**
 - capture 378 *et seq*
 - orientation of 27-35
 - theory/ linearization in 39 *et seq*
 - theory/ regularization in 39-46
- Satellites**
 - of Jupiter/ eclipses of 51-59
 - of Saturn/ resonances among 19-25
- Secular period**
 - of Trojan asteroids 158
- Stability**
 - linear of equilibrium points 289 *et seq*
 - topological 301-315
 - vertical 241 *et seq*
- Stability regions** 33, 123-136, 289 *et seq*
- in phase space** 145 *et seq*
- Surface of section** 141-152, 226, 325 *et seq*
- Szebehely's equation** 353
- Three-body problem**
 - circular restricted 141-152, 197 *et seq*, 213-224, 235-247
 - collinear restricted 325-338
 - elliptic restricted 27-35, 163, 165-176, 257-261, 289-299, 317-323, 339-350, 397
 - general 249-256, 278 *et seq*, 301-315
 - restricted 107-114, 153-158, 225-233

- three-dimensional 163,
165-176, 213-224, 235-247,
257-261
 - trapping mechanisms in
306 *et seq*
- Tidal evolution
- hypothesis of the origin
of resonances 19-25
 - of the Moon 4 *et seq*
- Transition curves
- in the elliptic problem
295 *et seq*
- Trapping
- analytical theory of 369-375
 - asymptotic 349
 - time of resonant orbits
397-410
- Trapping mechanism
- approach to mirror conditions
as 277-287
- Two-body problem
- of variable mass 369-375
 - rectilinear 328
- Variational equations 252, 260
- Vertical
- self-resonant orbits
218 *et seq*
 - stability parameters 213-224,
242 *et seq*
- Zero velocity curves
- in the elliptic restricted
problem 320 *et seq*
- Zonal Earth satellite
- application of regularizing
function to 44