

CONTENTS

Volume 1

Dongho CHAE — On the incompressible Euler equations and the blow-up problem	1
Hideo KUBO — Uniform decay estimates for the wave equation in an exterior domain	31
Thomas C. SIDERIS — Dispersive estimates for solutions of multi-dimensional isotropic symmetric hyperbolic systems	55
Takafumi AKAHORI — A sharp bilinear restriction estimate for the sphere and its application to the wave-Schrödinger system	65
Fumioki ASAKURA and Mitsuru YAMAZAKI — Survey of admissible shock waves for 2×2 systems of conservation laws with an umbilic point	87
Hayato FUJIWARA and Masao YAMAZAKI — The Helmholtz decomposition in Sobolev and Besov spaces	99
Toshiaki HISHIDA — Steady motions of the Navier-Stokes fluid around a rotating body	117
Mitsuteru KADOWAKI, Hideo NAKAZAWA and Kazuo WATANABE — Non-selfadjoint perturbation of Schrödinger and wave equations	137
Hideo KOZONO, Kouei MINAMIDATE and Hidemitsu WADADE — Sobolev's imbedding theorem in the limiting case with Lorentz space and BMO	159
Takayuki KUBO — On the Stokes and Navier-Stokes equations in a perturbed half-space and an aperture domain	169
Shuji MACHIARA — Bilinear estimates for the transport equations	189
Yasunori MAEKAWA and Yutaka TERASAWA — On the Navier-Stokes equations with initial data nondecaying at space infinity	197
Satoshi MASAKI — Semi-classical analysis of the Hartree equation around and before the caustic	217
Hideyuki MIURA — Remark on the dissipative quasi-geostrophic equations in the critical space	237
Makoto NARITA — Wave maps in gravitational theory	253

Mitsuhiro OKAMURA, Yoshihiro SHIBATA and Norikazu YAMAGUCHI — A Stokes approximation of two dimensional exterior Oseen flow near the boundary	273
Tohru OZAWA and Kimitoshi TSUTAYA — On the Cauchy problem for Schrödinger–improved Boussinesq equations	291
Kanti PANDEY and Amit Kumar VAISH — Waves in two-phase flows	303
Hironobu SASAKI — Small data scattering for the Klein-Gordon equation with a cubic convolution	321
Jun-ichi SEGATA — On asymptotic behavior of solutions to the fourth order cubic nonlinear Schrödinger type equation	329
Yoshihiro SHIBATA and Rieko SHIMADA — On the Stokes equation with Robin boundary condition	341
Yoshihiro SHIBATA and Senjo SHIMIZU — L_p - L_q maximal regularity of the Neumann problem for the Stokes equations in a bounded domain	349
Taeko YAMAZAKI — Diffusion phenomenon for abstract wave equa- tions with decaying dissipation	363
Shuji YOSHIKAWA — On thermoelastic systems arising in shape memory alloys	383