## 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
$\label{eq:action} \begin{array}{l} \mbox{Takafumi Akahori} & - \mbox{A sharp bilinear restriction estimate for the sphere and its application to the wave-Schrödinger system} \end{array}$	65
Fumioki ASAKURA and Mitsuru YAMAZAKI — Survey of admissible shock waves for 2 $\times$ 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 Machihara — 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