数理解析研究所講究録888

Mathematical Fluid Mechanics and Modeling

京都大学数理解析研究所

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This lecture note collects 18 papers presented at the RIMS workshop " Mathematical Fluid Mechanics and Modeling", which was held at Research Institute for Mathematical Sciences, Kyoto University during May 30 – June 2, 1994. The workshop was originally planned by H. O. in order to make Professor Alexandre J. Chorin's visit to Kyoto be well publicized and to let his theory be available to as many scientists as possible. Then the first plan was enlarged by participation of some physicists who wish to listen to Professor Chorin's lectures. As a result, we made the workshop one of the annual series of workshops on fluid physics.

Professor Chorin's visit was supported by the Japan Society for Promotion of Science, without whose support this workshop were impossible. On behalf of all the workshop participants, we express our sincere thanks to JSPS.

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Contents

The manuscripts of the following two lectures were not available before the deadline.

T. Kambe (University of Tokyo),
Geometrical study of Eulerian fluid motion and KdV system: geodesic equations and and curvatures

K. Ohkitani (Hiroshima University)
Vorticity-strain conjugation in incompressible fluid flows