

## Two manuscripts left by late Professor Tosio Kato in his personal computer

Printed in the following pages are manuscripts recovered from files left by late Professor Tosio Kato in his personal computer. Two manuscripts recovered together will be placed in the following order.

### Untitled manuscript

1. Introduction
2. The linearized equation
3. Solution of the linearized equation
4. Proof of Theorem I

### A remark on the 2D-Euler equation

The files were salvaged from the personal computer by Professor H. O. Cordes. The files were written for a Word Processing Soft, which Professor Kato loved so much. Unfortunately, this soft has become unfamiliar by now and can be processed only by old machines. Professor Cordes solved the riddle and managed to make a printout. Afterwards, S. T. Kuroda, guided by that printout, tried to convert original files to  $\text{\LaTeX}$  source files. Here is  $\text{\LaTeX}$  printout. Two types of printouts were carefully compared.

In transforming to  $\text{\LaTeX}$  source file it is deliberately avoided to use environments such as “theorem, lemma, eqnarray”, so that “Kato’s style” be kept as far as possible. For convenience, however,  $\mathbf{R}$  is used instead of  $\mathbb{R}$  in the original file. Obvious misprints, only a few, have been left as they are.

The text is based on the following original files:

### Untitled manuscript

- Section 1: EULERN2.1a 990831-0912
- Section 2: EULERN2.2a 990831-0908
- Section 3: EULERN2.3a 990906-12
- Section 4: EULERN2.4a 990912-17

There are some earlier versions which are not attached here.

### A remark on the 2D-Euler equation

File Name: EULER67.b 990917-1001.

The last writing-in was recorded as 1999-10-01 22:31,  
the day before the sudden death of Professor Kato.

A previous version with the file name EULER67 existed with last writing-in in April, 1999.

(Note by editors)