## THE FIELDS INSTITUTE

ABSTRACTS 1.2

FOR RESEARCH IN MATHEMATICAL SCIENCES

## MASAHISA SATO Yamanashi University

One way Hereditary Rings (25-30)

Let A be a semiperfect ring and J its Jacobson radical. We assume A is basic. We introduce the notion of a one way hereditary ring with a one way length n. This notion is a generalization of hereditary ring. We characterize this ring and show that this ring has a finite global dimesion, in fact,  $gl.dimA \leq n$ . One of the good characterization of this ring is as following; There is an order of idempotents  $e_1, e_2, \ldots, e_n$  such that  $1 = e_1 + e_2 + \cdots + e_n$  and  $p.d.f_i(R/J)f_i = 1$  as  $f_iRf_i$ -module, here  $f_i = e_1 + e_2 \cdots + e_i$ , for each  $i = 1, 2, \ldots, n$ .