

## Data Fitting

## 1 Why

Often the precepts and postcepts are elements of d-dimensional and m-dimensional space, respectively. Moreover, we often believe in the existence of a functional prelation between these two spaces.

## 2 Definition

We think a vector in d-dimensional space and a vector in m-dimensional space are approximately related by a function. We call the argument to the function the *independent variable* and we call the result of the function the *dependent variable*. If m = 1, the dependent variable is a single real number.