

### 「 Morphological mathematics 」

#### 「 Problem 1 」

Aim: analyse the effects of the basic operators.

**Don't use the matlab function, write your own code**

- load the image "hubble"
- binarize this image
- study the effect of with different size of structuring elements with the erosion operator
- apply the same approach for dilatation, opening and closing
- propose a method to measure the granulometry i

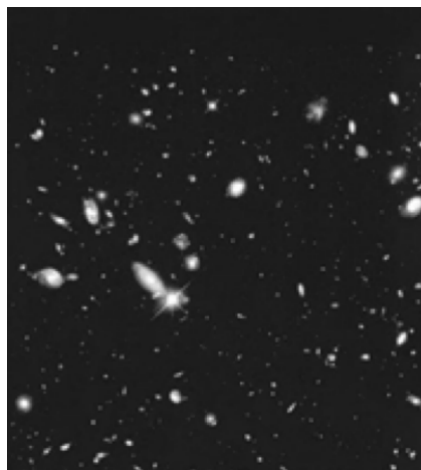


Figure 1: Hubble

## Problem 2

Aim : propose extensions of binary Morphological Mathematics operators

**Don't use the matlab function, write your own code**

- propose extensions of binary Morphological Mathematics operators to gray levels images
- propose a gradient filter based on MM operators



Figure 2: Moon