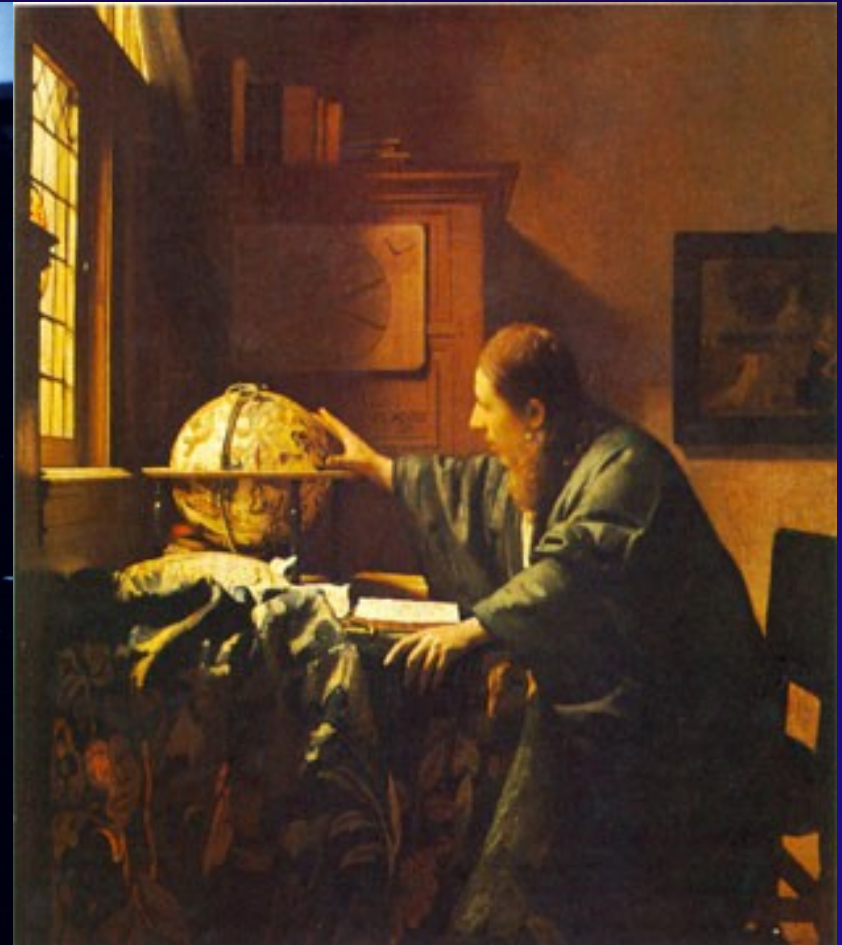


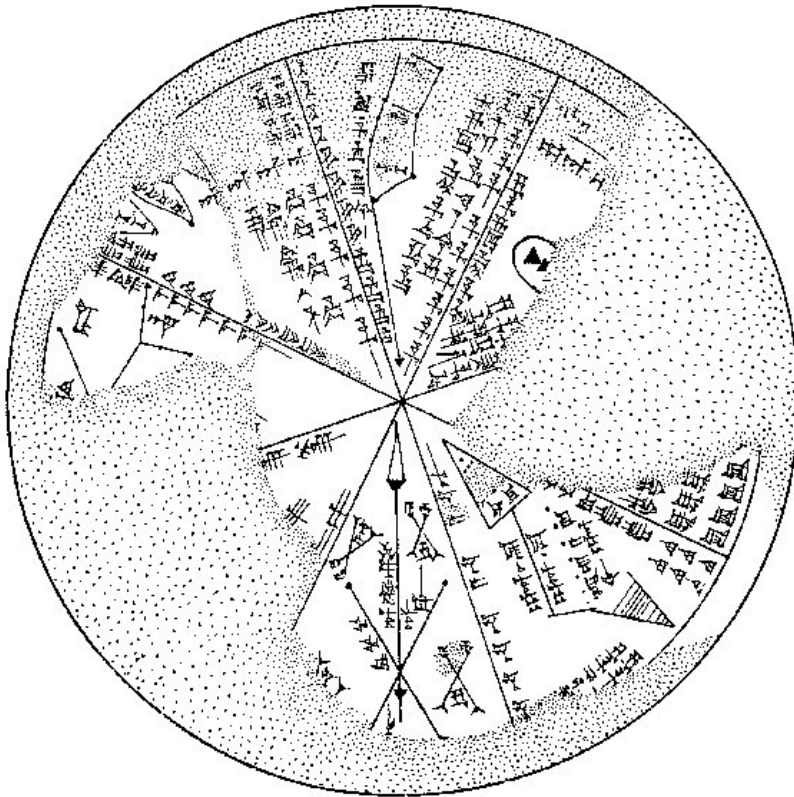
A Che Serve l'Astronomia?

Stefano Cristiani

Trieste, 28 settembre 2010



Gli albori dell'Astronomia Calendario-Agricoltura-Religione





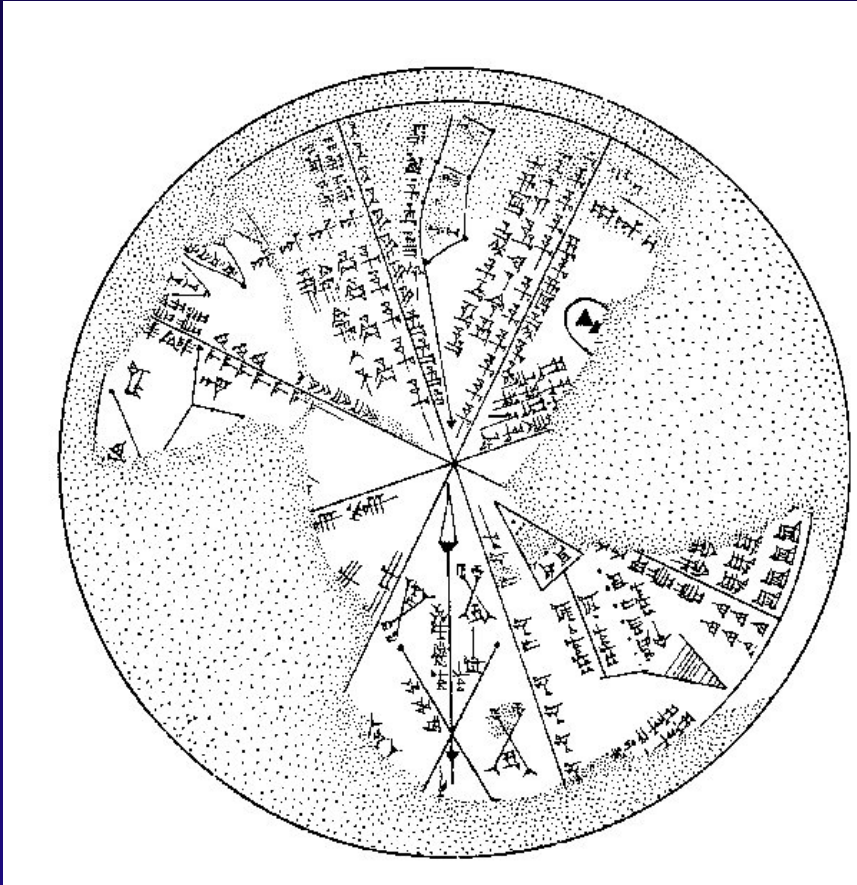






MS 2781

The Middle Babylonian almanac. Babylonia, ca. 1100-800 BC

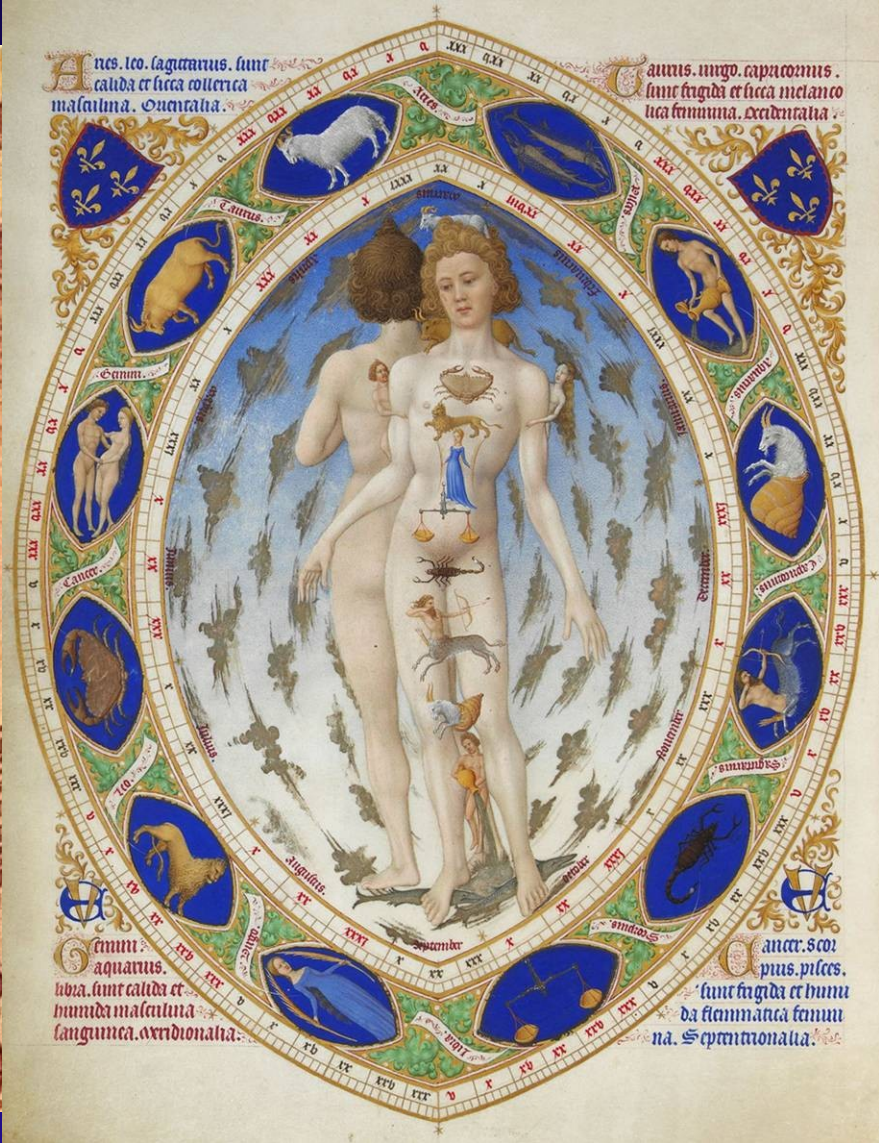




ORION AND THE COW SOTHIS SEPARATED BY THE SPARROW-HAWK.



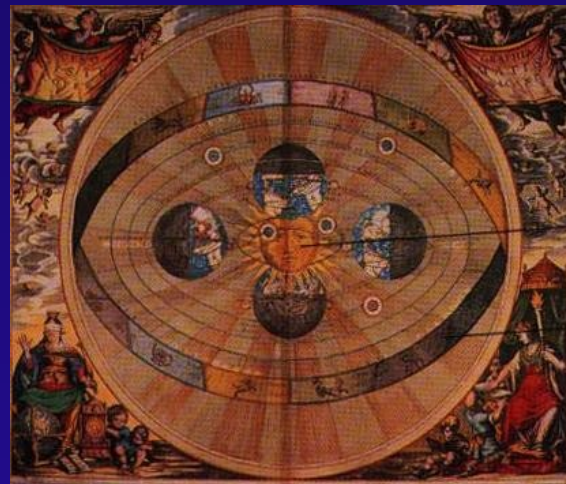
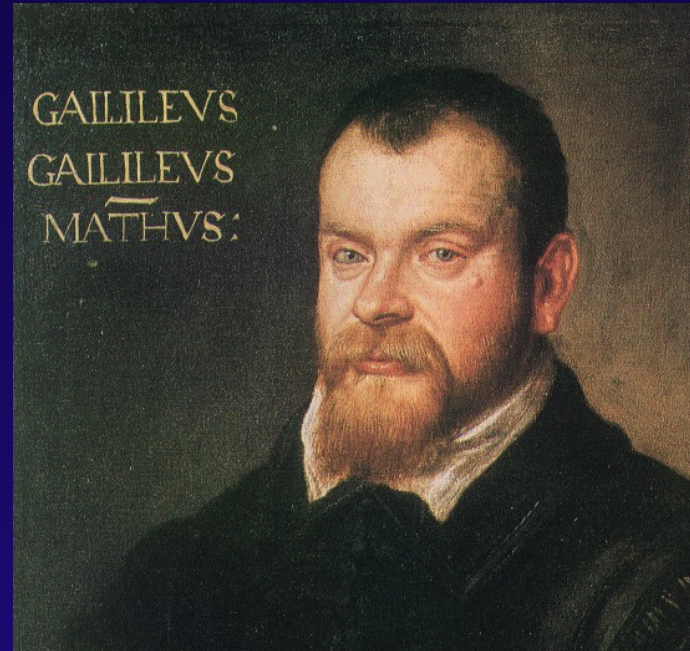
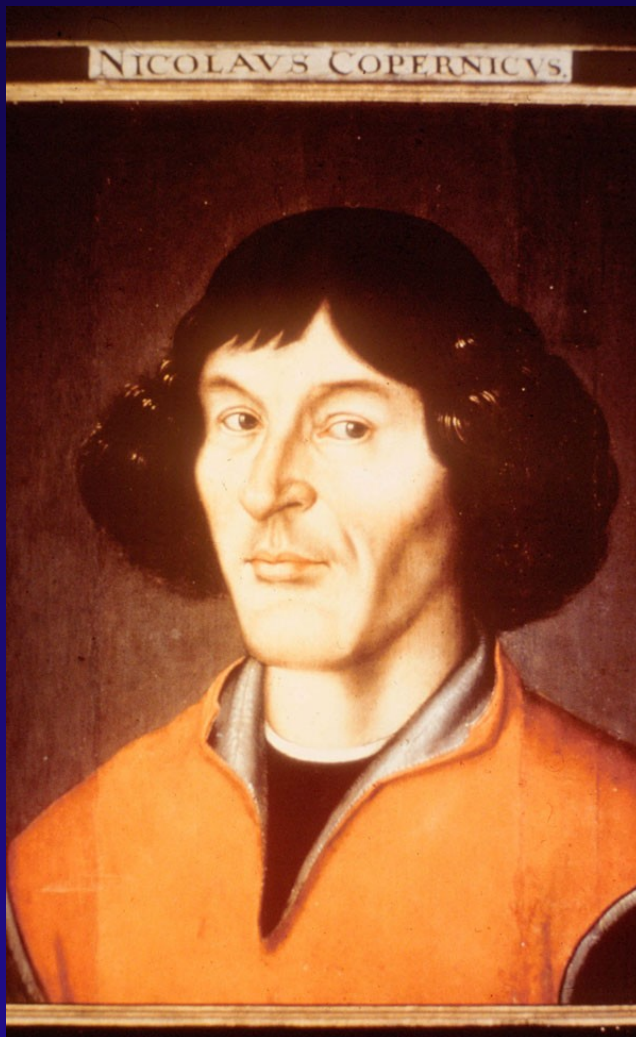
Astrologia







Visione del Mondo - Filosofia







u r b i et o r b i







1241 UT
23/10/02



1342 UT
12/10/02



1352 UT
5/10/02



1352 UT
23/9/02



1519 UT
16/9/02



1541 UT
10/9/02



1548 UT
31/8/02



1350 UT
12/8/02



1803 UT
1/8/02



1810 UT
3/5/02



1902 UT
1/6/02



1525 UT
19/6/02



1940 UT
3/7/02



1630 UT
20/7/02





Io

Europa

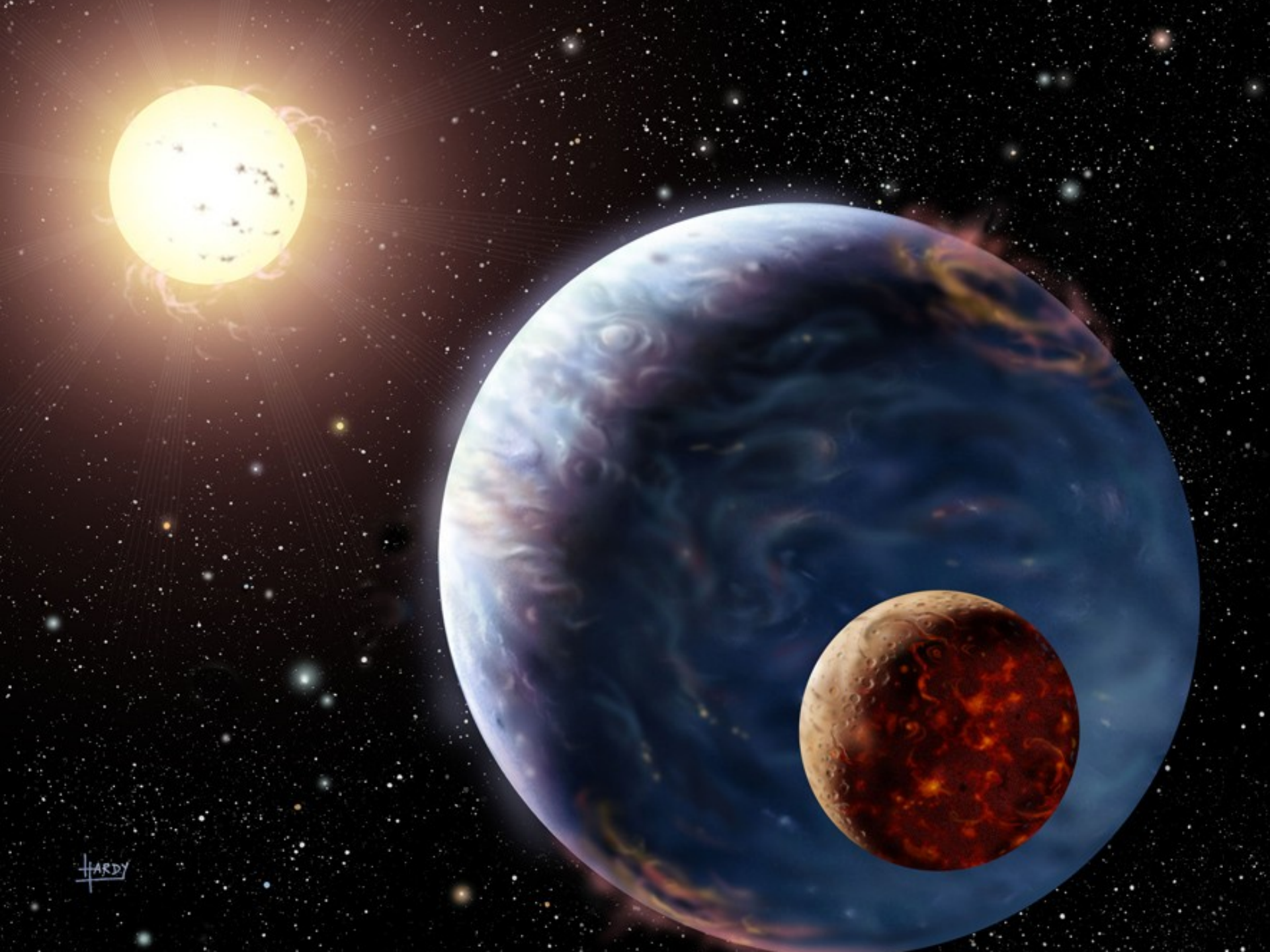
Ganymede

Callisto

Astronomia Oggi – Domande Fondamentali

- 1) Esplorazione dello spazio profondo – l'ultima frontiera
 - Pianeti Extrasolari – Astrobiologia
 - Le prime stelle – Galassie Primordiali – l'Era Oscura



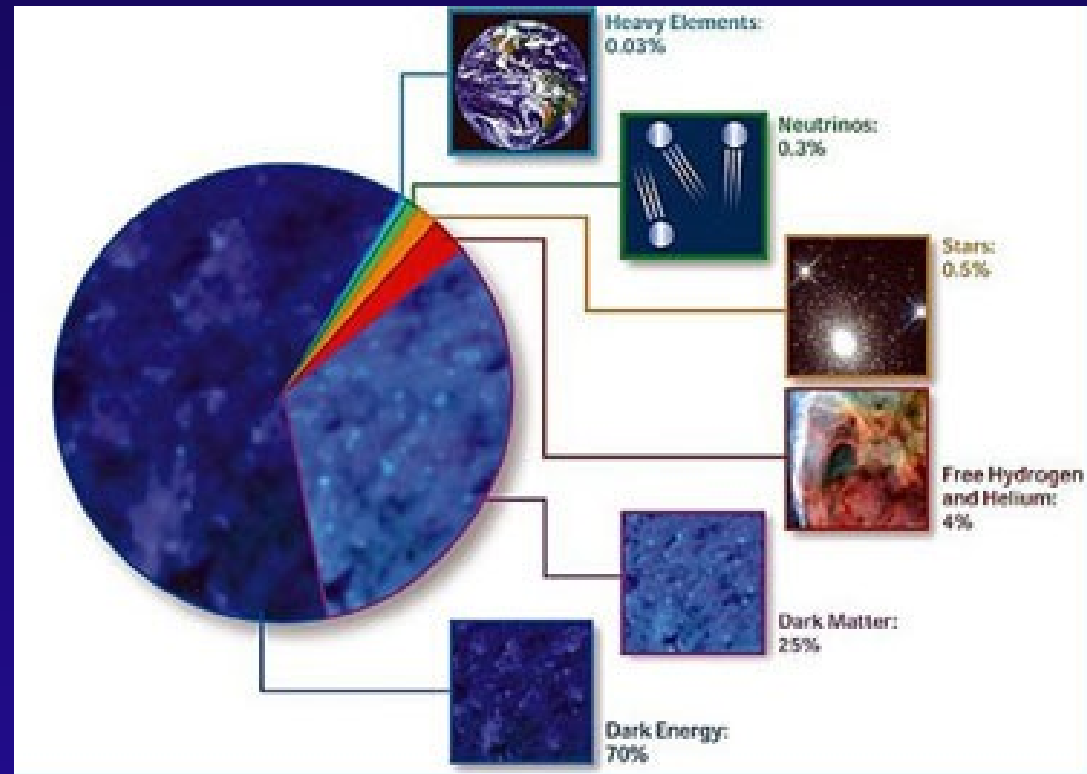
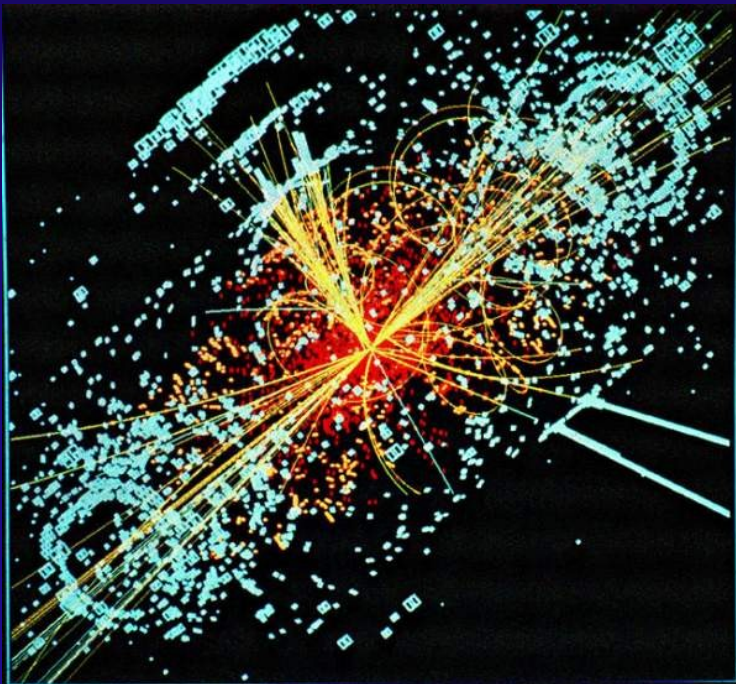


HARDY

Astronomia Oggi – Domande Fondamentali

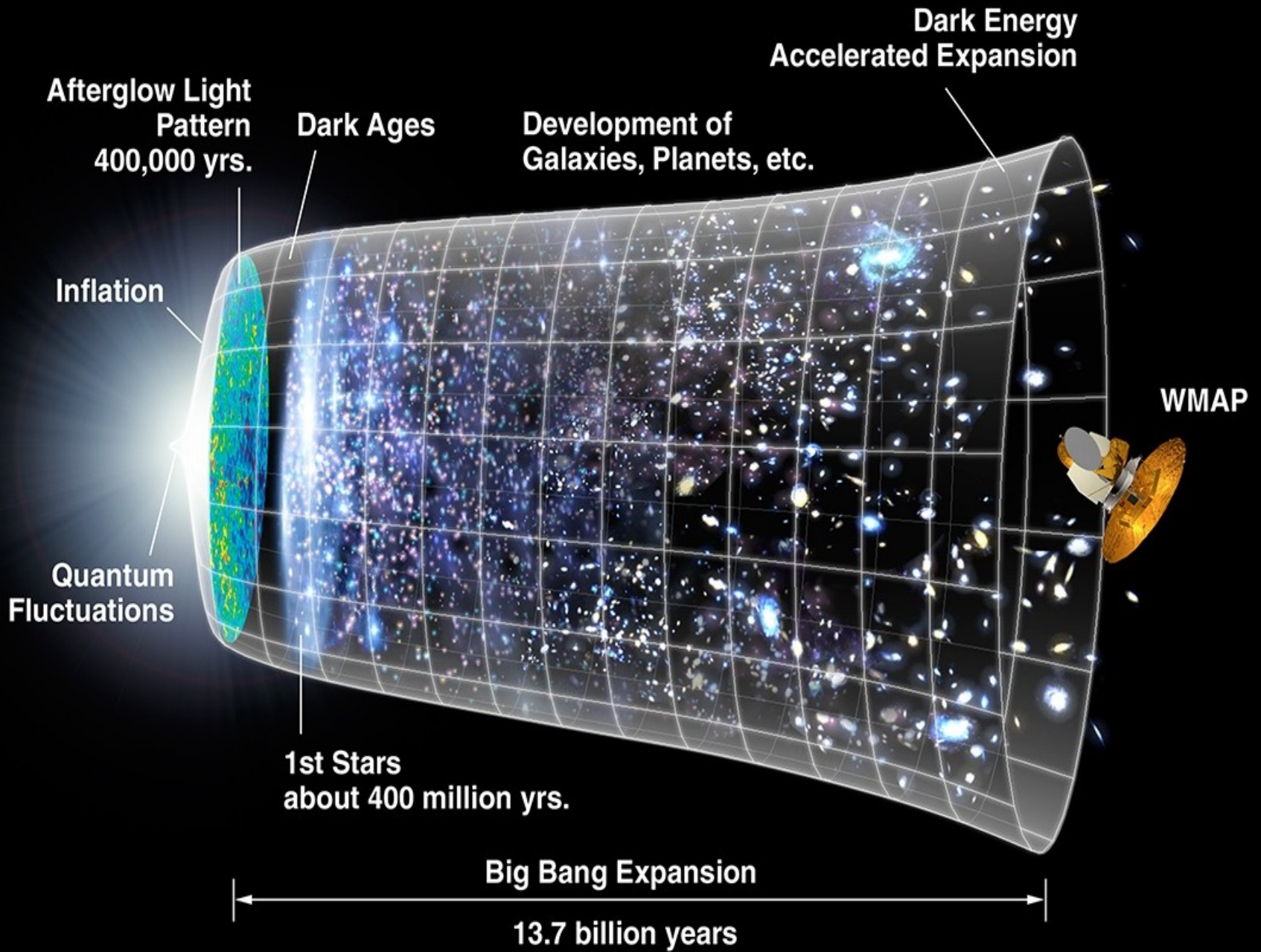
2) TOE – Teoria del Tutto

- Parametri cosmologici
- **Materia Oscura**
- **Dark Energy**

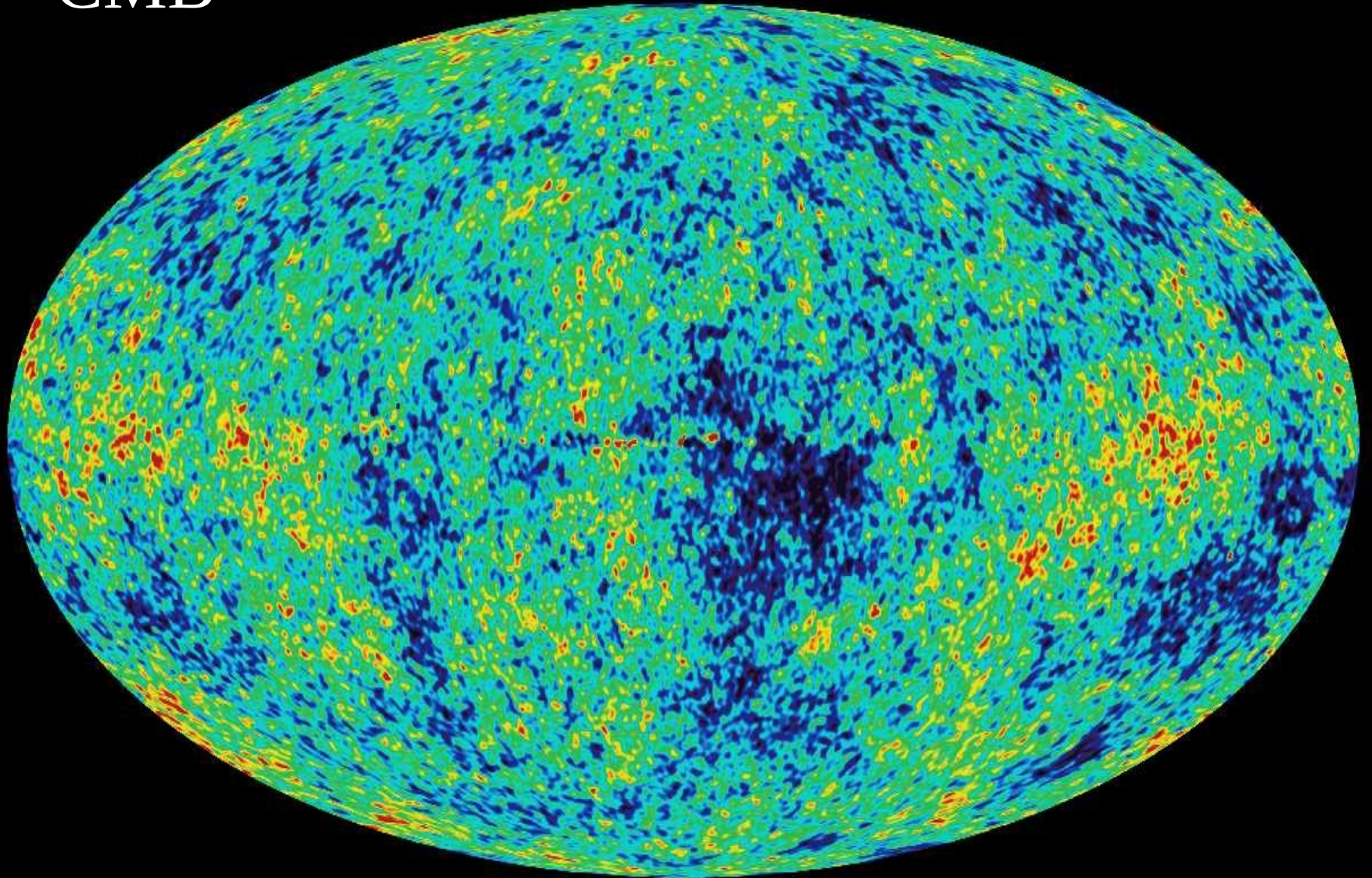




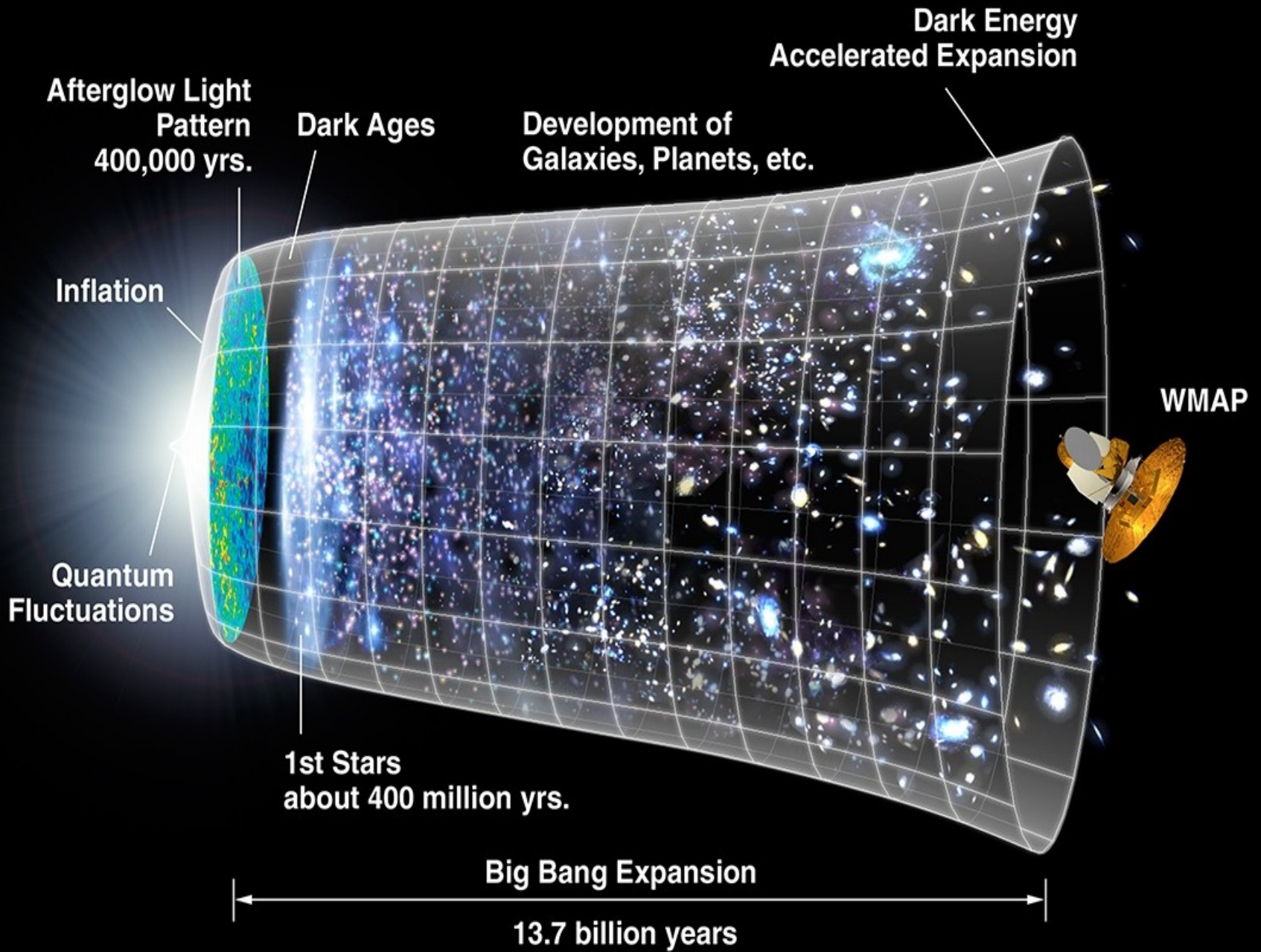




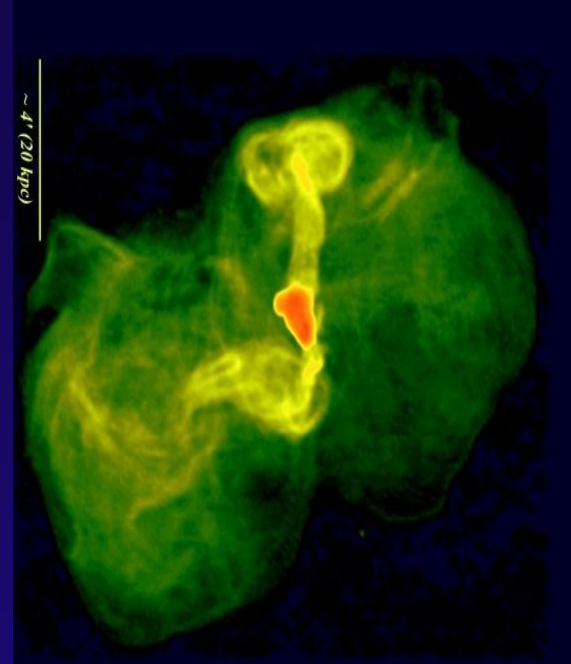
CMB



380.000 ANNI DOPO IL BIG BANG



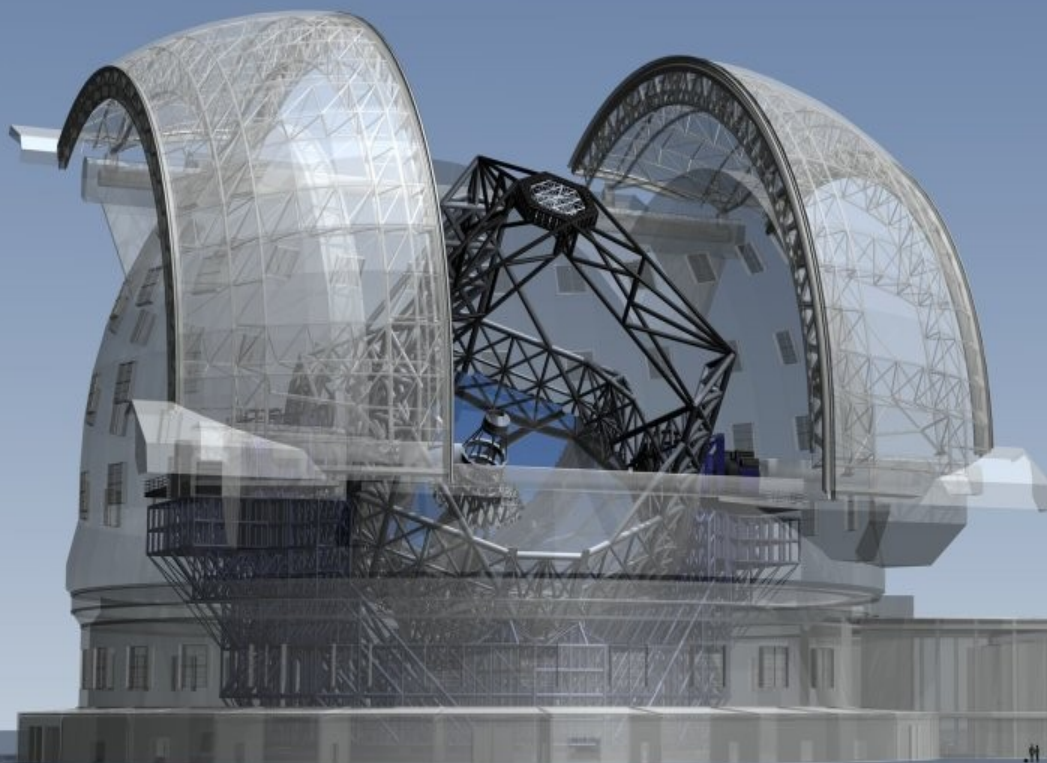
Esplorazione Universo - Tecnologia

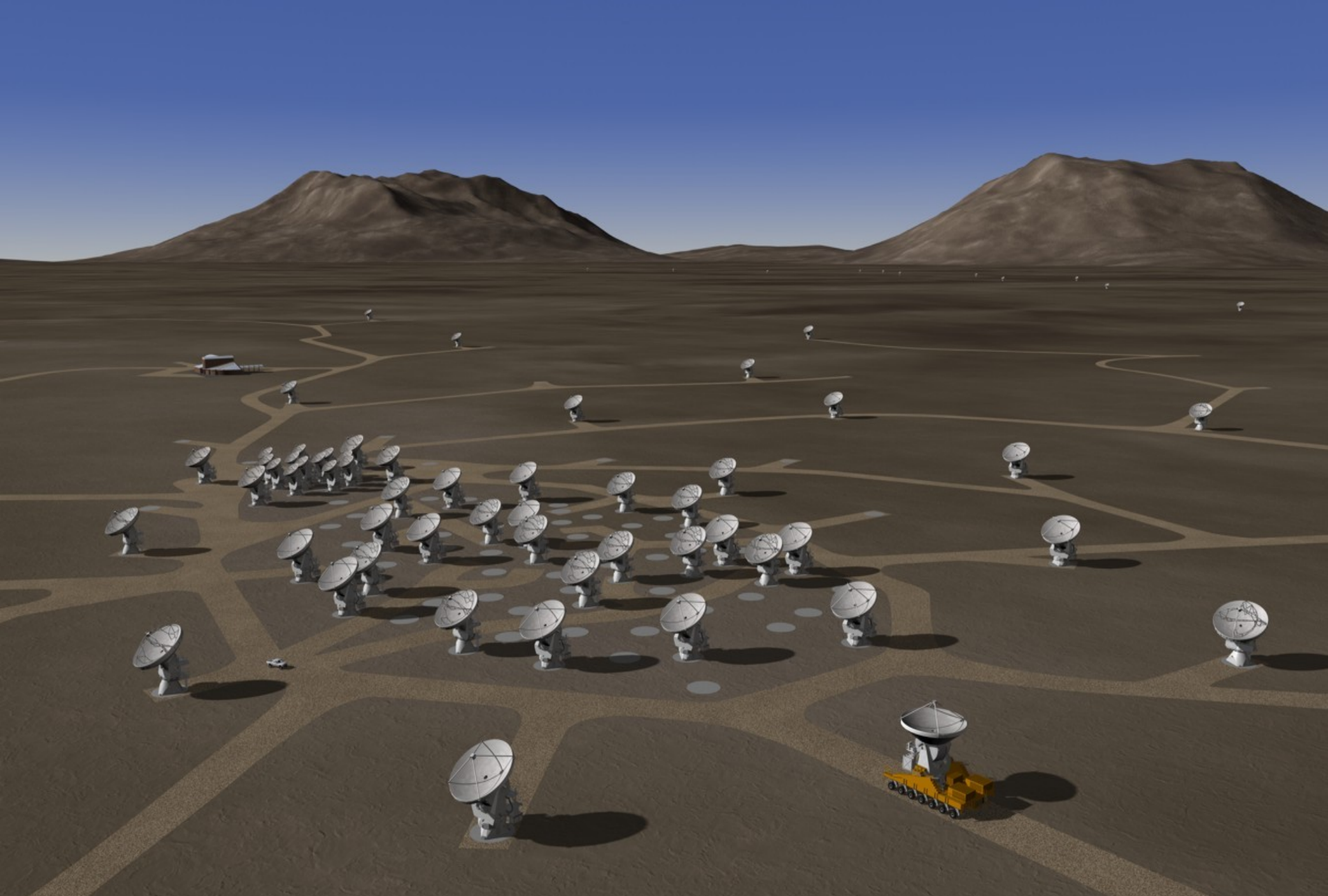


VLT – PARANAL - CHILE



E-ELT





ALMA – CHAJNANTOR (CHILE) 5000m s.l.m.

Image Processing

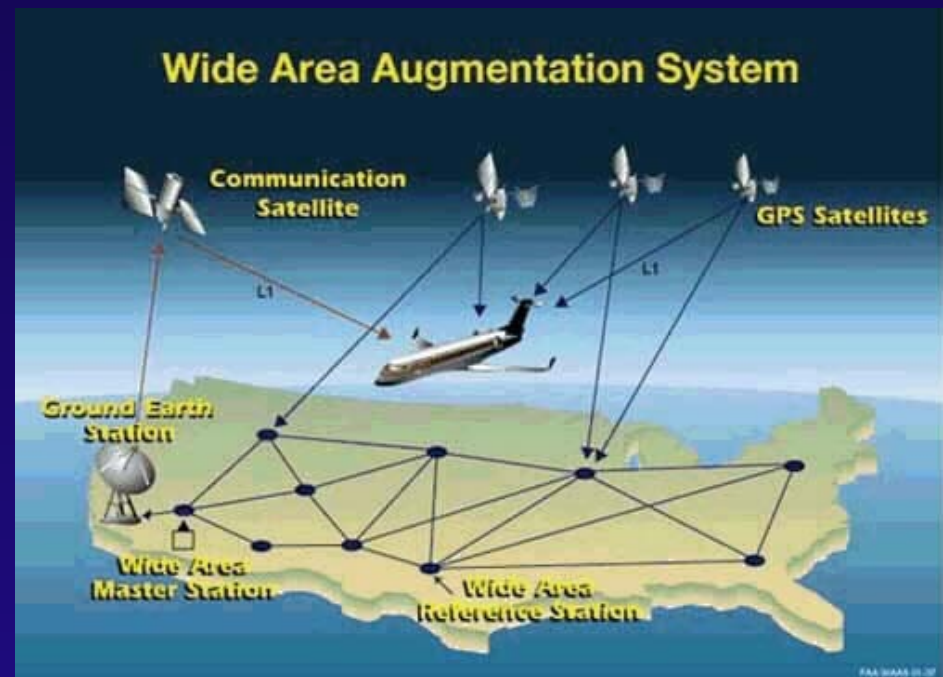
La tecnologia di Image Processing technology ora usata per la TAC e RM e' derivata da tecniche originariamente svilppate per la radio-astronomia e per analizzare immagini lunari e planetarie



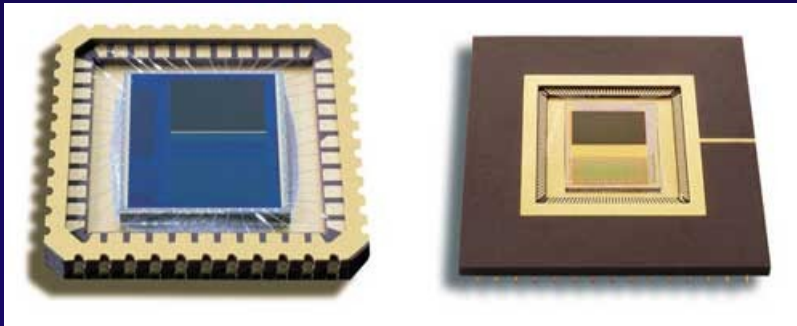
Applicazioni mediche

Global Positioning Satellite

- Unita` GPS hanno enormemente migliorato le operazioni di ricerca e salvataggio.
- Wide Area Augmentation System posizionamento aerei



Spinoffs per i Consumatori



Chips per macchine fotografiche



Memory foam

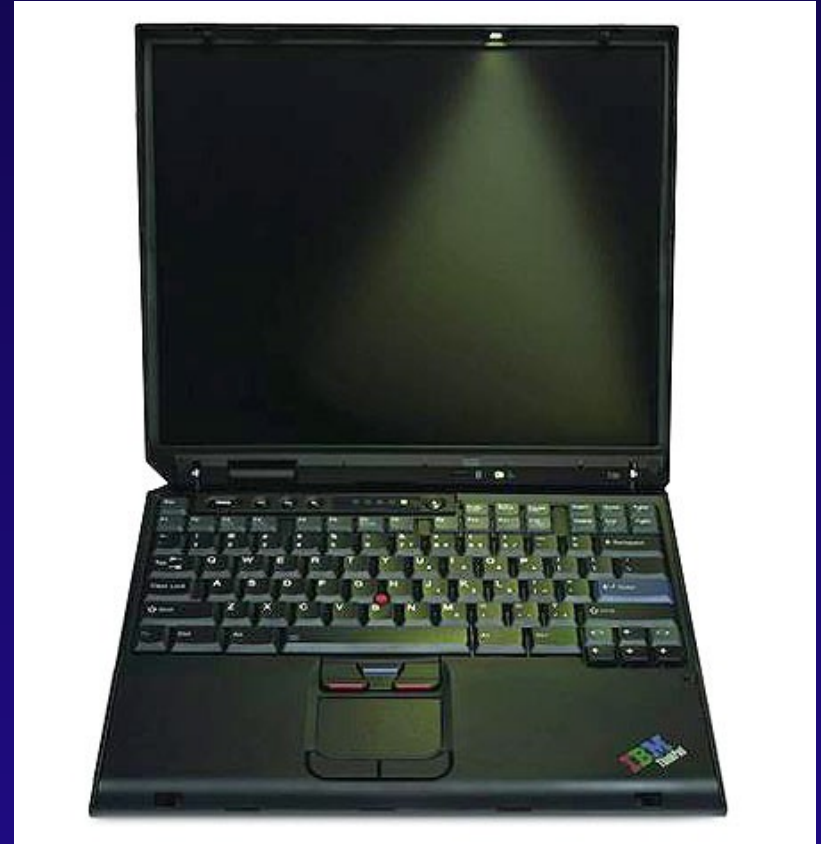


Fibre ottiche



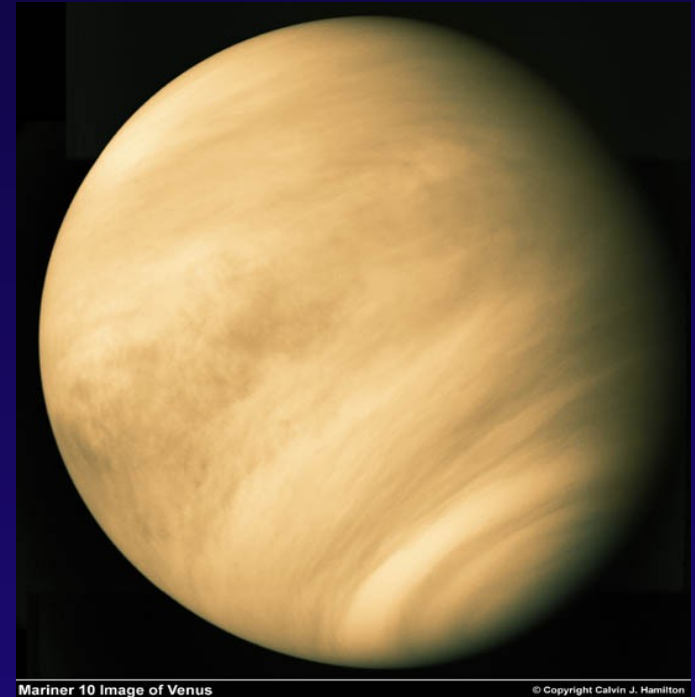
Miniaturizzazione

Molta tecnologia che ha prodotto computers piu` piccoli e`derivata dalla necessita`di ridurre pesi e volumi per le missioni spaziali.



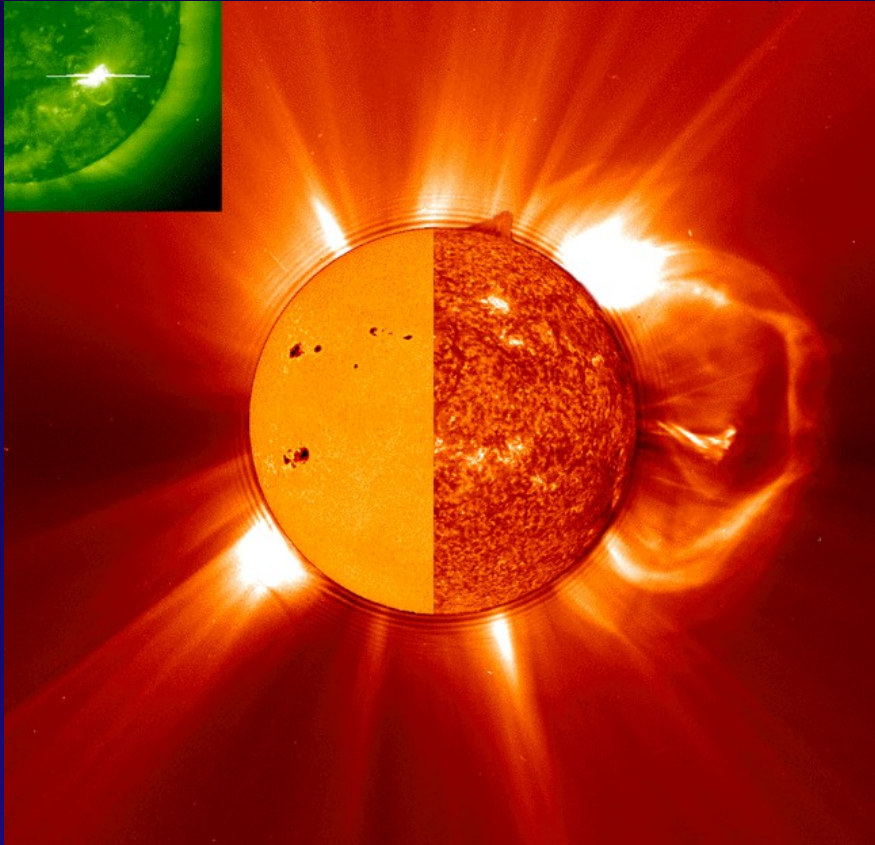
Effetto Serra – Cambi climatici

Scoperto su Venere negli
anni '60



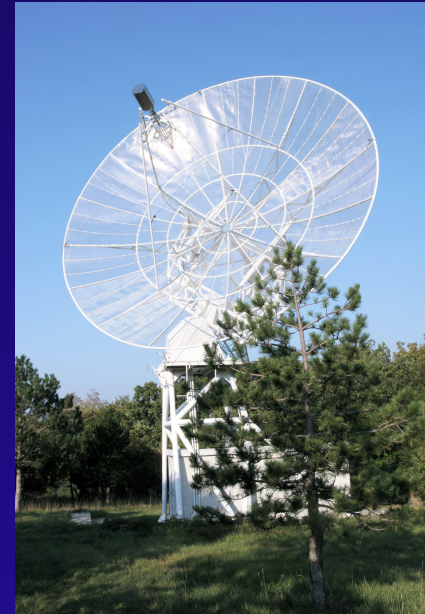
Quel che è successo su Marte
Può capitare anche a noi?

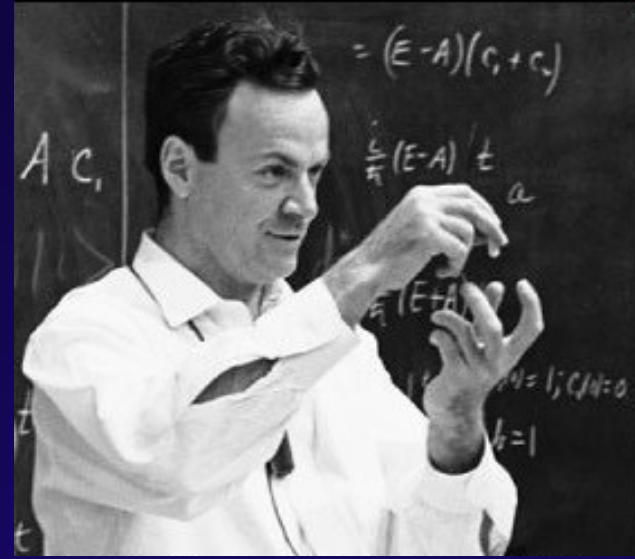
La Connessione Terra-Sole



Effetti dei brillamenti ed eventi coronali del sole sulle telecomunicazioni e sui satelliti in orbita.

Metereologia spaziale - TSRS





"Physics is like sex.

**Sure, it may give some practical results,
but that's not why we do it."**

- R. Feynman (Nobel Laureate 1965)