

# COSMIC CHART

## CONTENT OF THE BB

## CHRONOLOGY

END OF THIRD TIME (DAY)

12.545 BILLION YEARS

SUN IN PLACE

9.2 BILLION YEARS

MILKY WAY FORMED

1.8 BILLION YEARS

FIRST GALAXIES

1 BILLION YEARS

GIANT BLACK HOLES, GIANT QUASARS

.95 BILLION YEARS

TINY GALAXIES: Seen by GOODS SURVEYS

500,000 YEARS

BARYON ACOUSTIC WAVES-BARYONIC MATTER  
SEPARATES

370,000 YEARS

FIRST STARS

300,000 YEARS

HOT PLASMA MIX OF PHOTONS, ELECTRONS

275,000 YEARS

100,000 YEARS

BARYON, PROTONS, NEUTRONS, DARK MATTER

14 MINUTES

DARK AGE-NO LIGHT-NO PHOTONS

3 MINUTES

FIRST ATOMIC NUCLEI

1 SECOND

COSMIC MICROWAVE BACKGROUND  
-CBM

.0004 SECOND

EXOTIC MATTER

PLASMA -INFLATION -B-MODES

PLANCK ERA

$10^{32}$  SECONDS

?

BIG BANG