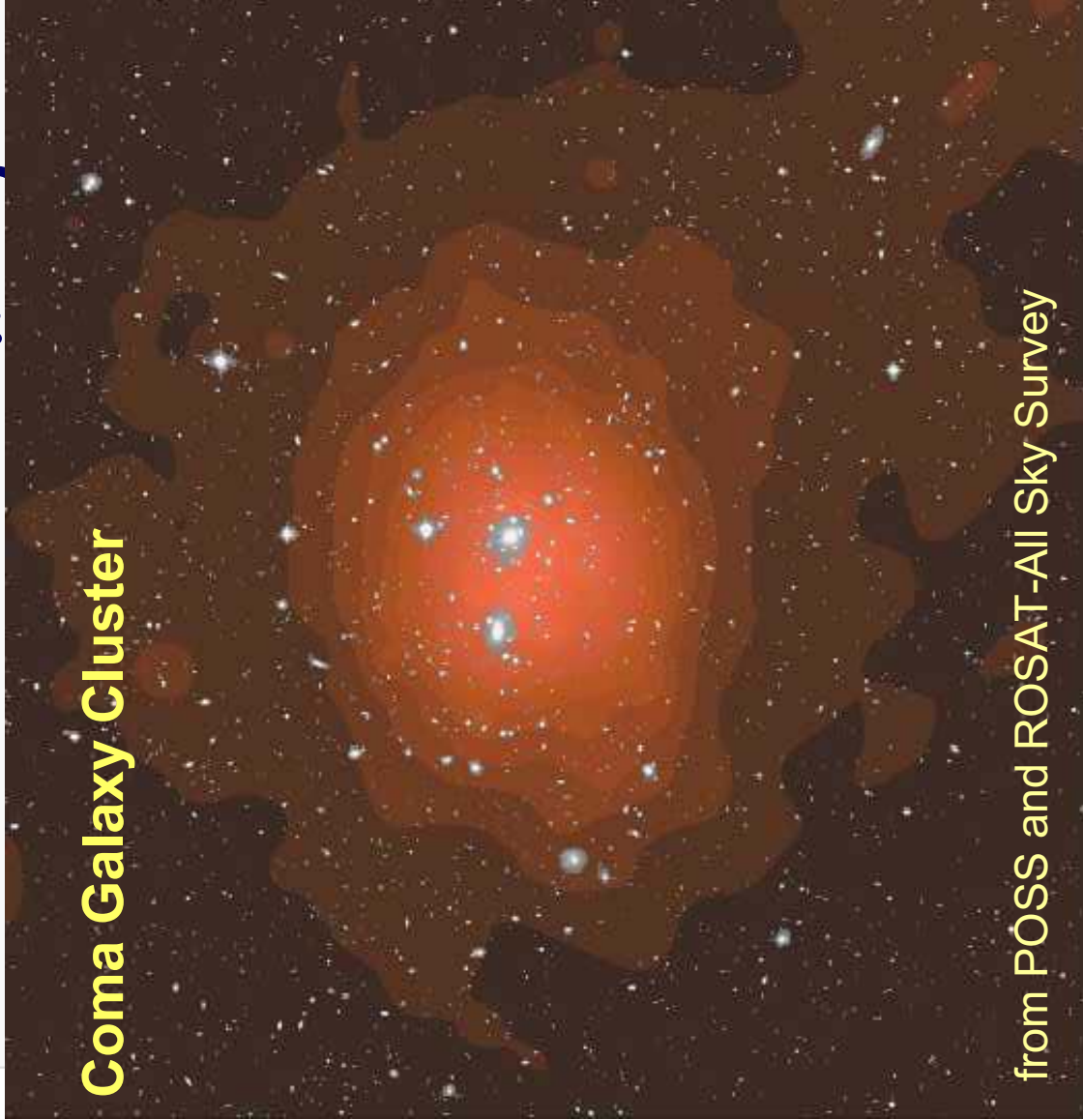


The Role of X-ray Galaxy Clusters in Cosmological Studies

Coma Galaxy Cluster



from POSS and ROSAT-All Sky Survey

82 – 87% = Dark Matter

11 – 13% = hot gas

2 - 5% = galaxies (for $H_0 = 70$)

Galaxy Clusters, the largest well defined objects in the Universe. They form a well understood integral part of the cosmic large-scale structure.

Therefore they are ideal probes to study cosmic evolution and to test cosmological models.

Three fundamental astronomical building blocks of the Universe:

Stars

Galaxies

Clusters of Galaxies