

Formación y evolución de las galaxias



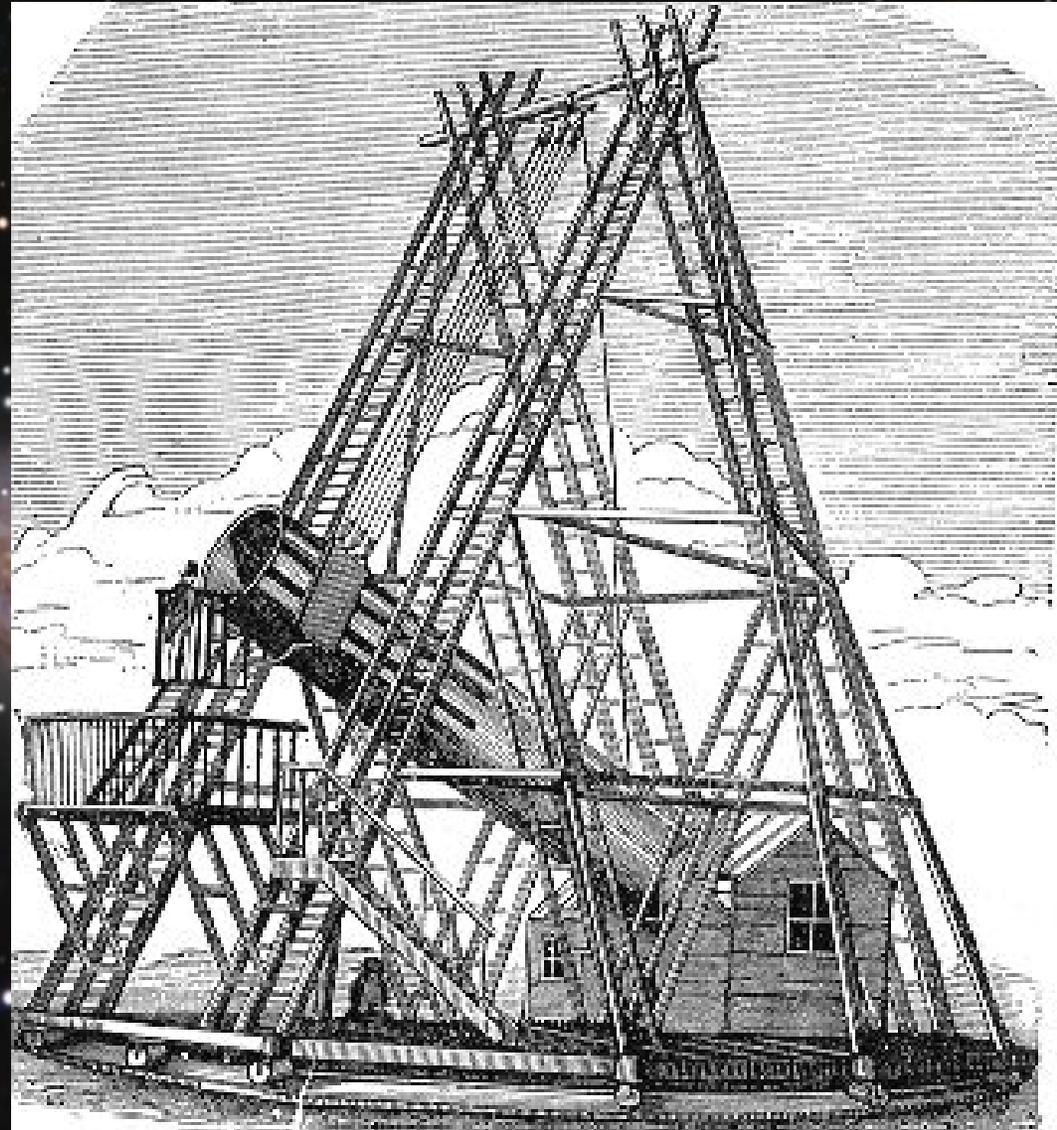
**Dr. Julián Martínez
Observatorio Astronómico, UNC
CONICET**

Resumen de la charla:

- Descubrimiento
- Generalidades: Que son? Dónde están?
Cuántas hay?
- Agrupaciones de galaxias
- Formación de galaxias
- Evolución de las galaxias

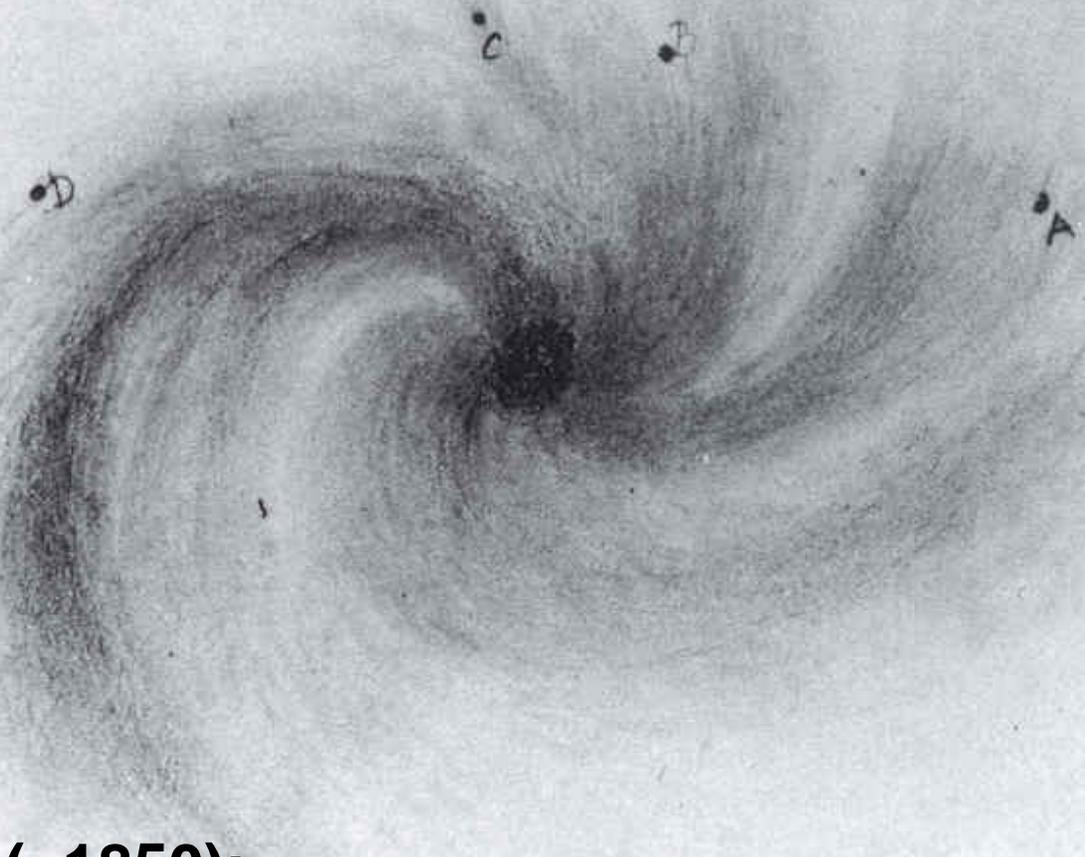
Un poco de historia...

- Herschell, (S. XVIII), estudio de las nebulosas, algunas resultan ser agrupaciones de estrellas



1622
21
13.26

X

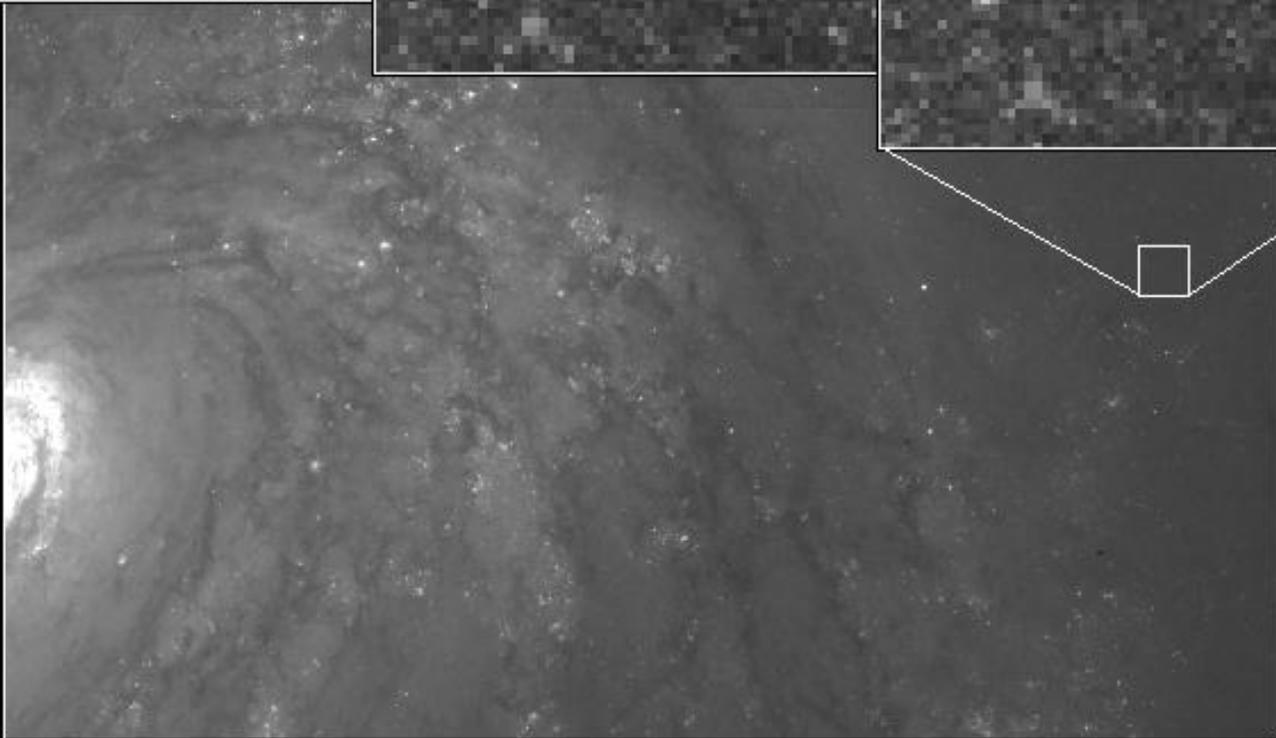
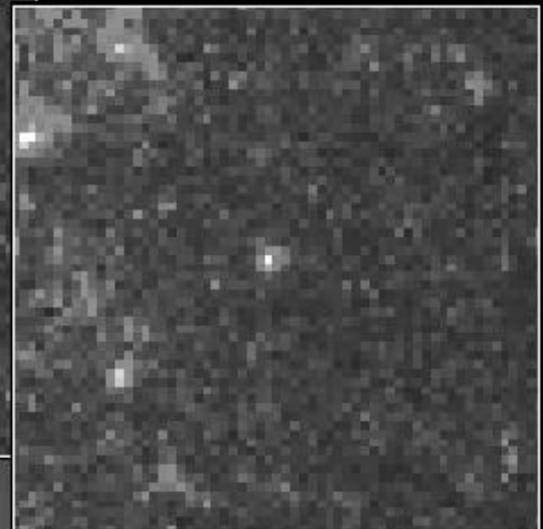
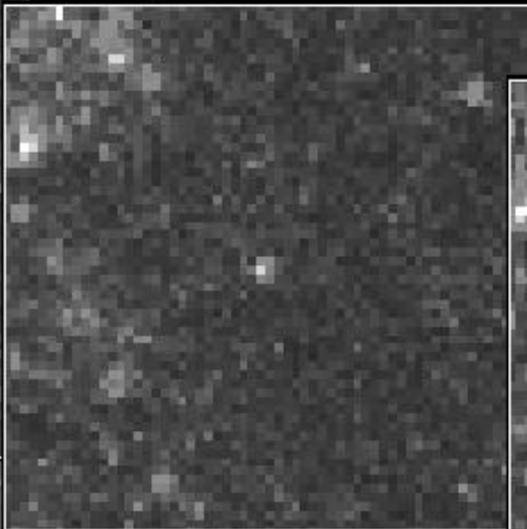
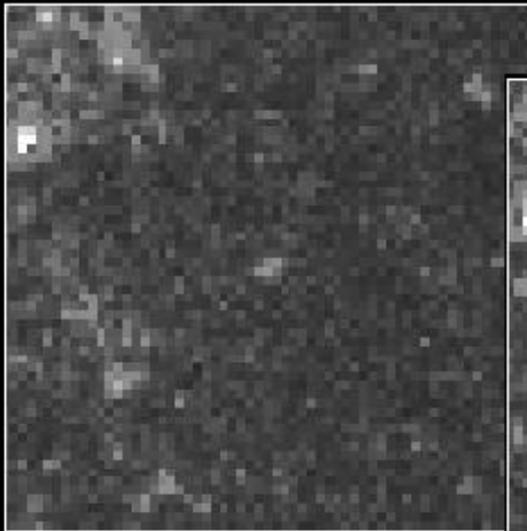


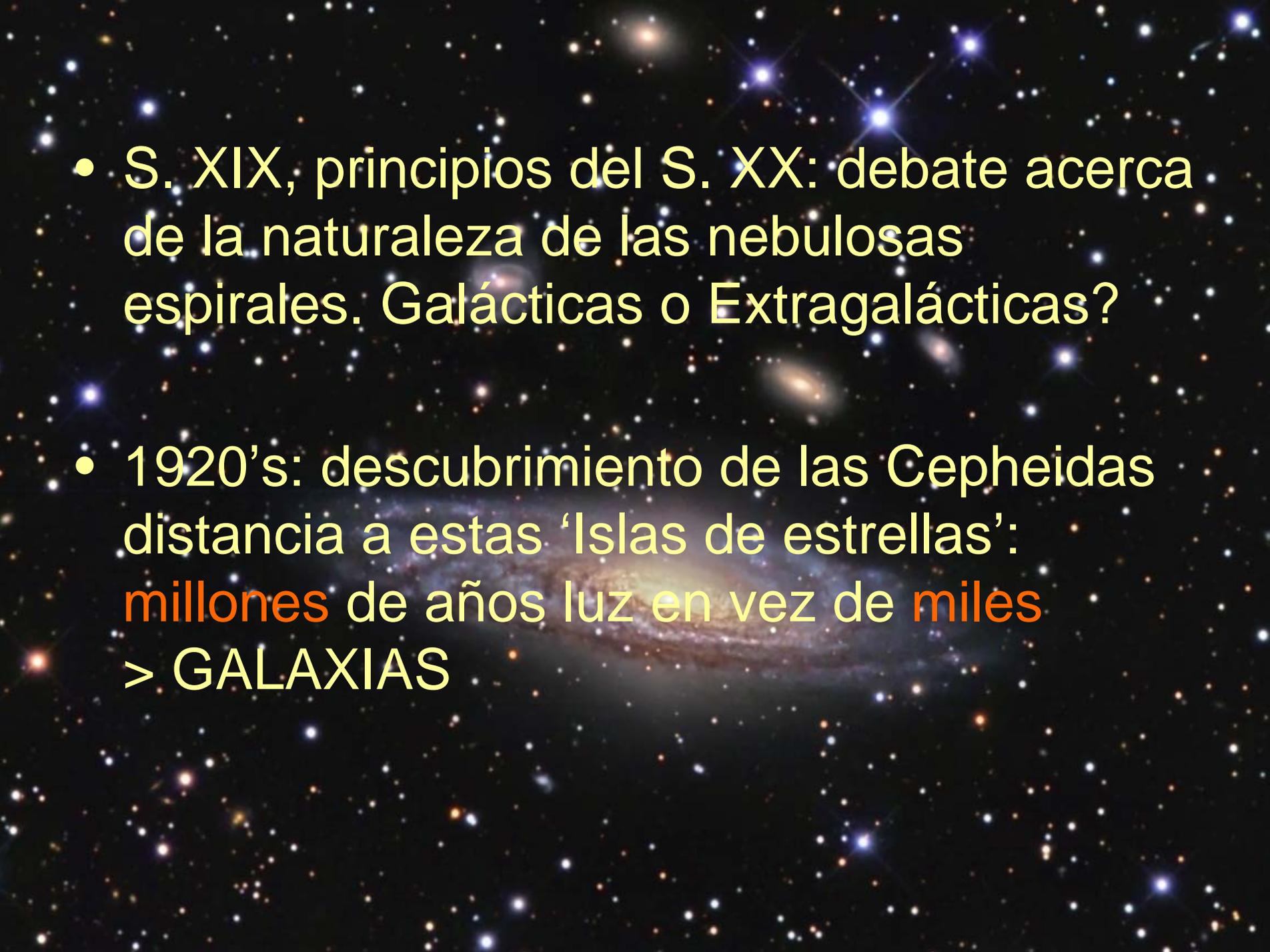
**Lord Rosse (~1850):
estructura espiral de
algunas nebulosas**

...shell
...sketches
...carefully
...with
...different
...now
...employed
...and the
...after
...Cambridge Observatory

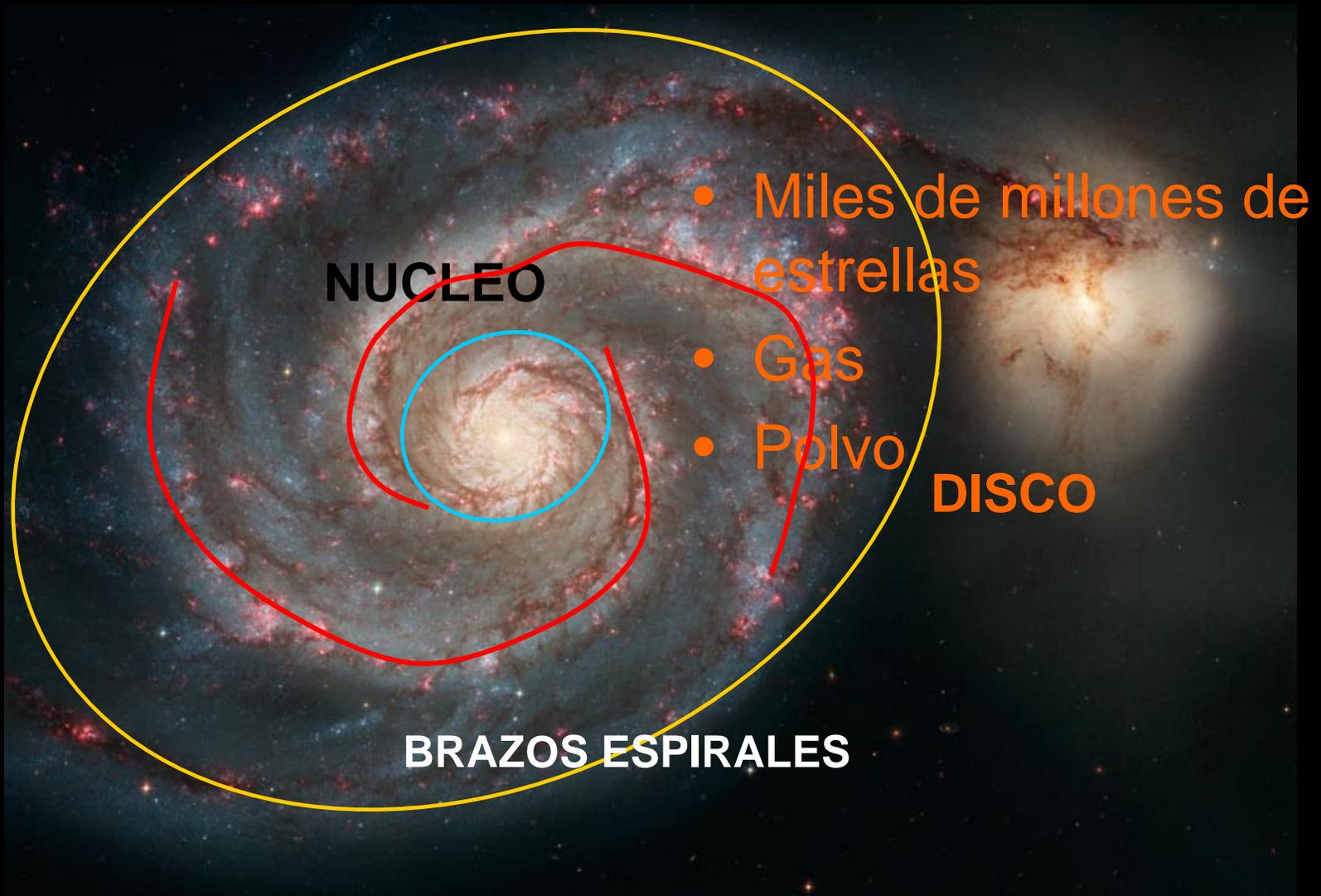
Cepheid Variable in M100

HST-WFPC2



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- S. XIX, principios del S. XX: debate acerca de la naturaleza de las nebulosas espirales. Galácticas o Extragalácticas?
 - 1920's: descubrimiento de las Cepheids distancia a estas 'Islas de estrellas': millones de años luz en vez de miles > GALAXIAS

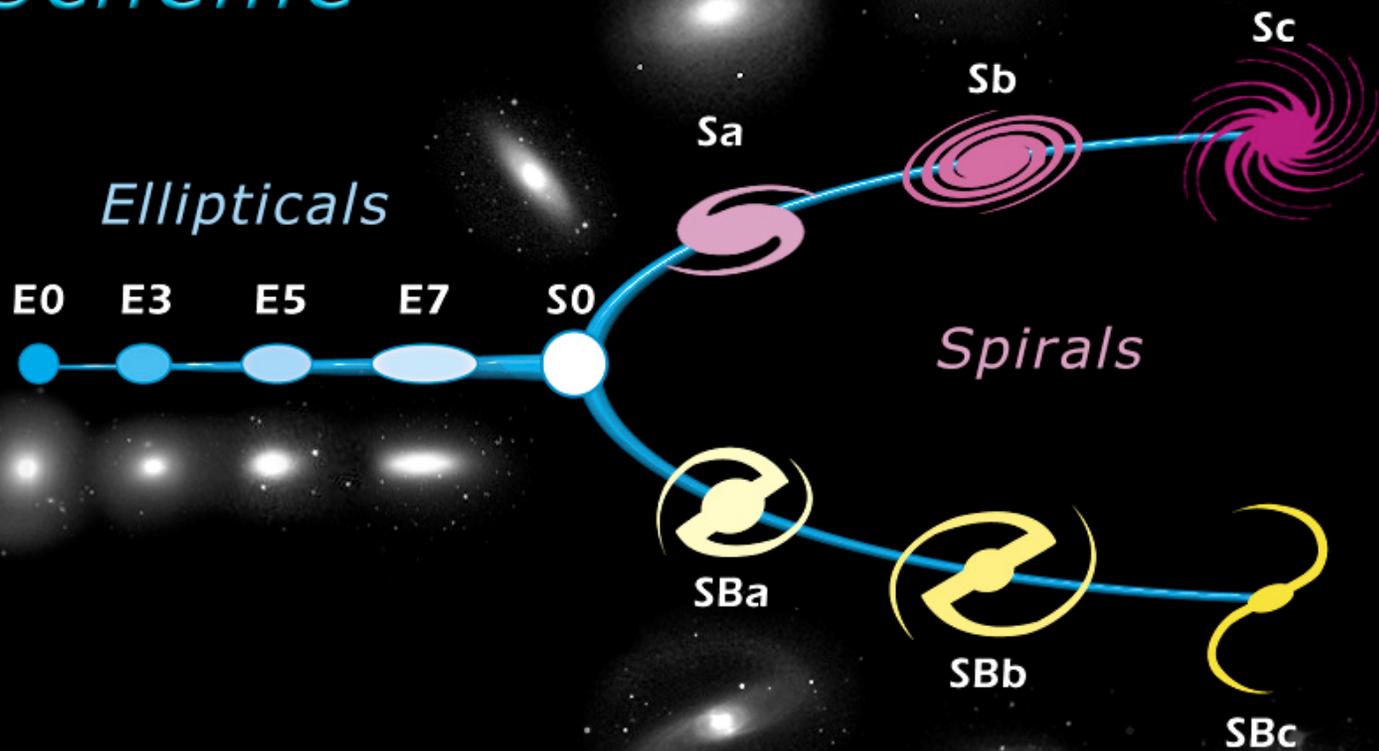
Galaxias: que son?



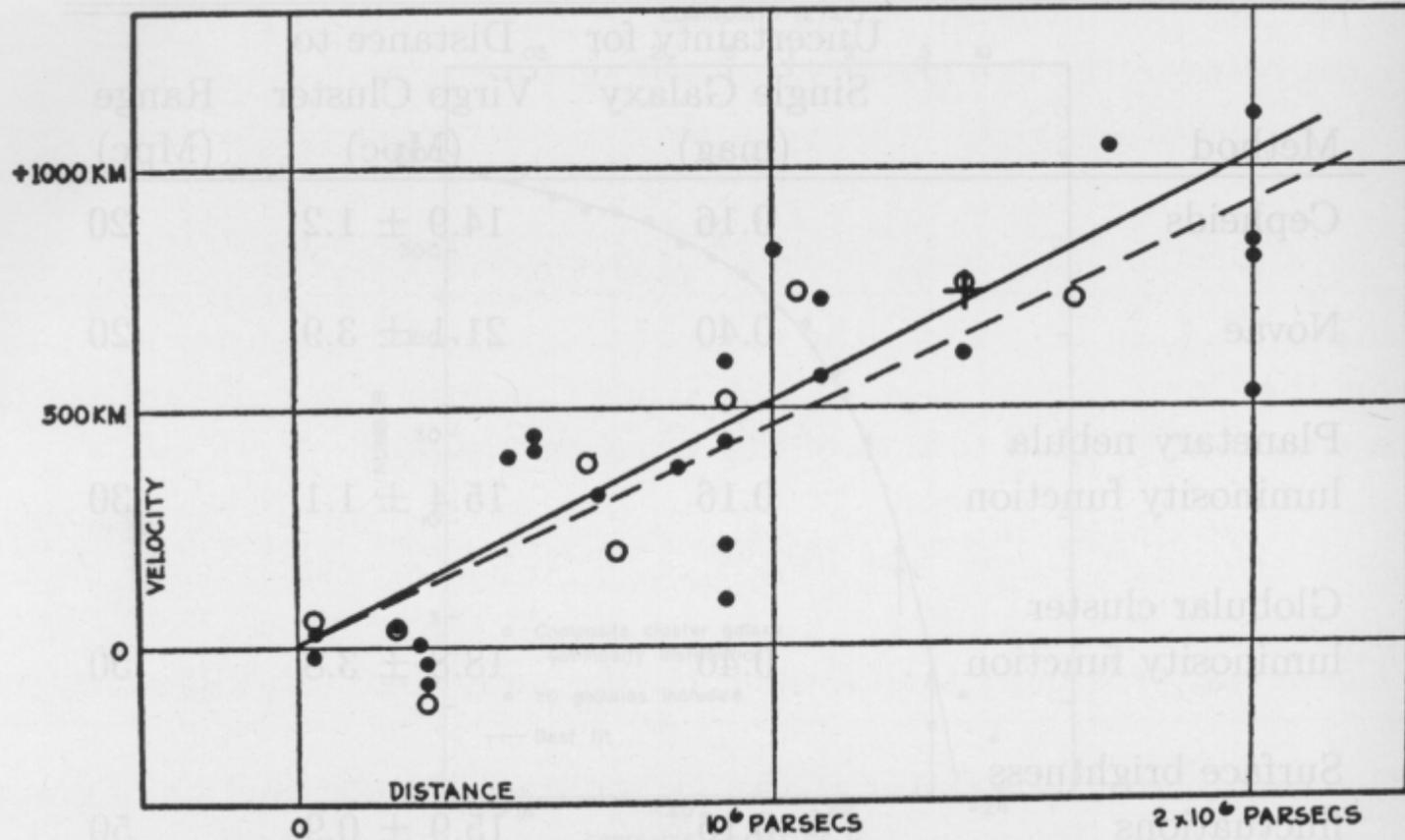




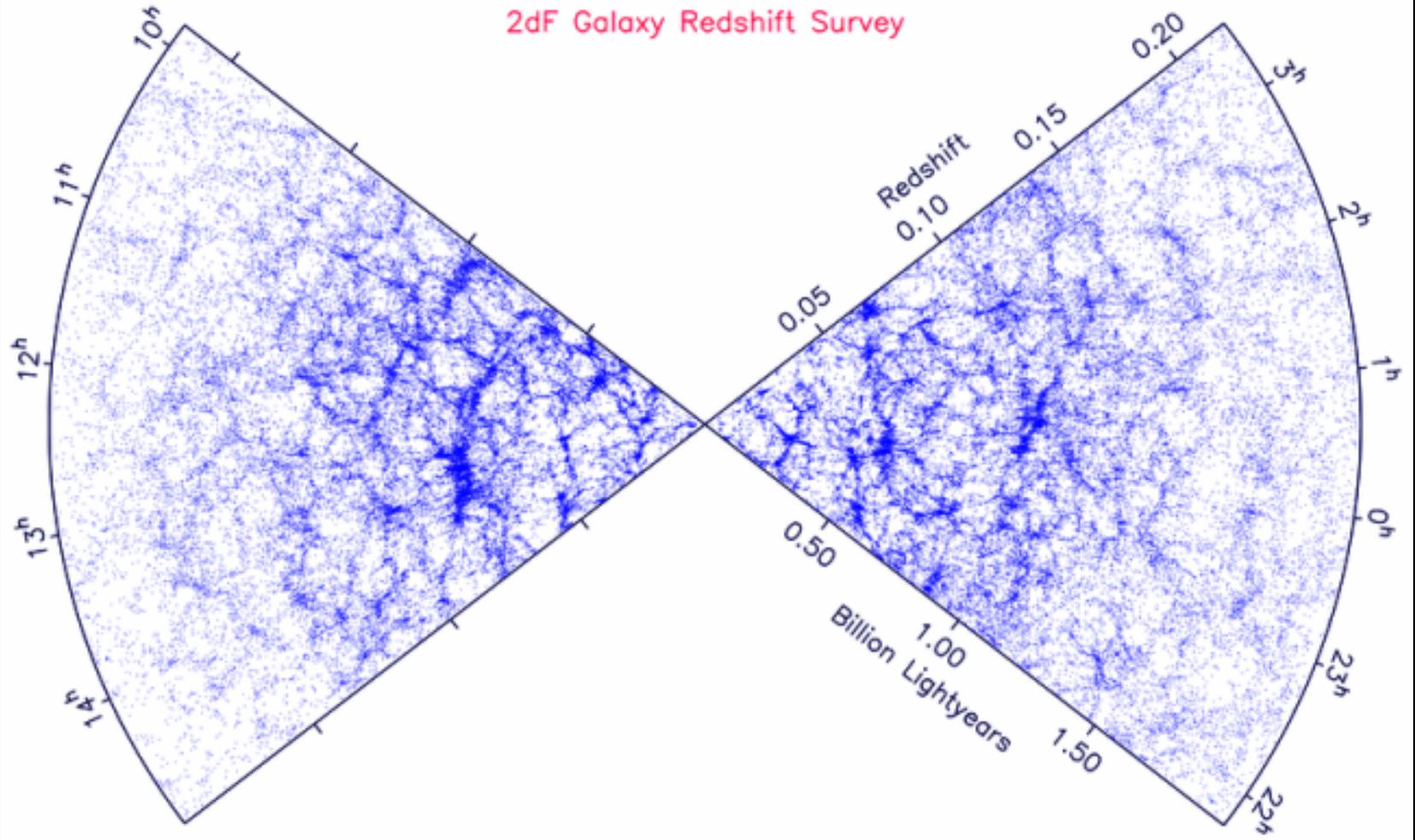
Edwin Hubble's Classification Scheme



Hubble: Expansión del Universo



2dF Galaxy Redshift Survey

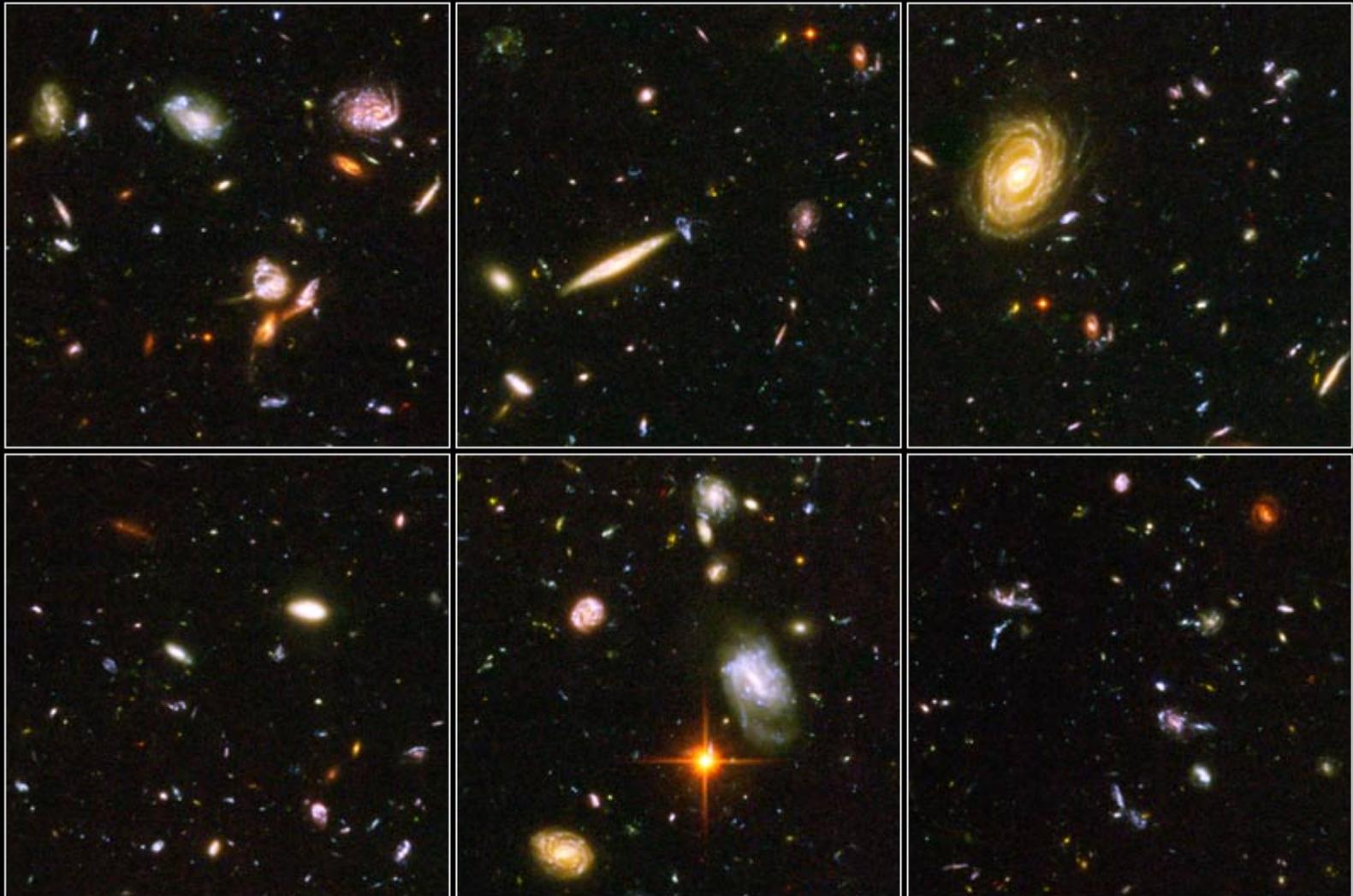


Peliculita de la millenium flight
through para mostrar LSS



Hubble Ultra Deep Field Details

HST ■ ACS



NASA, ESA, S. Beckwith (STScI) and The HUDF Team

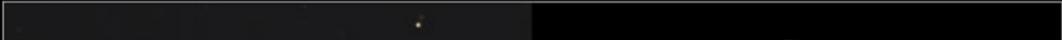
STScI-PRC04-07c



Sistemas de galaxias:

Grupos y Cúmulos

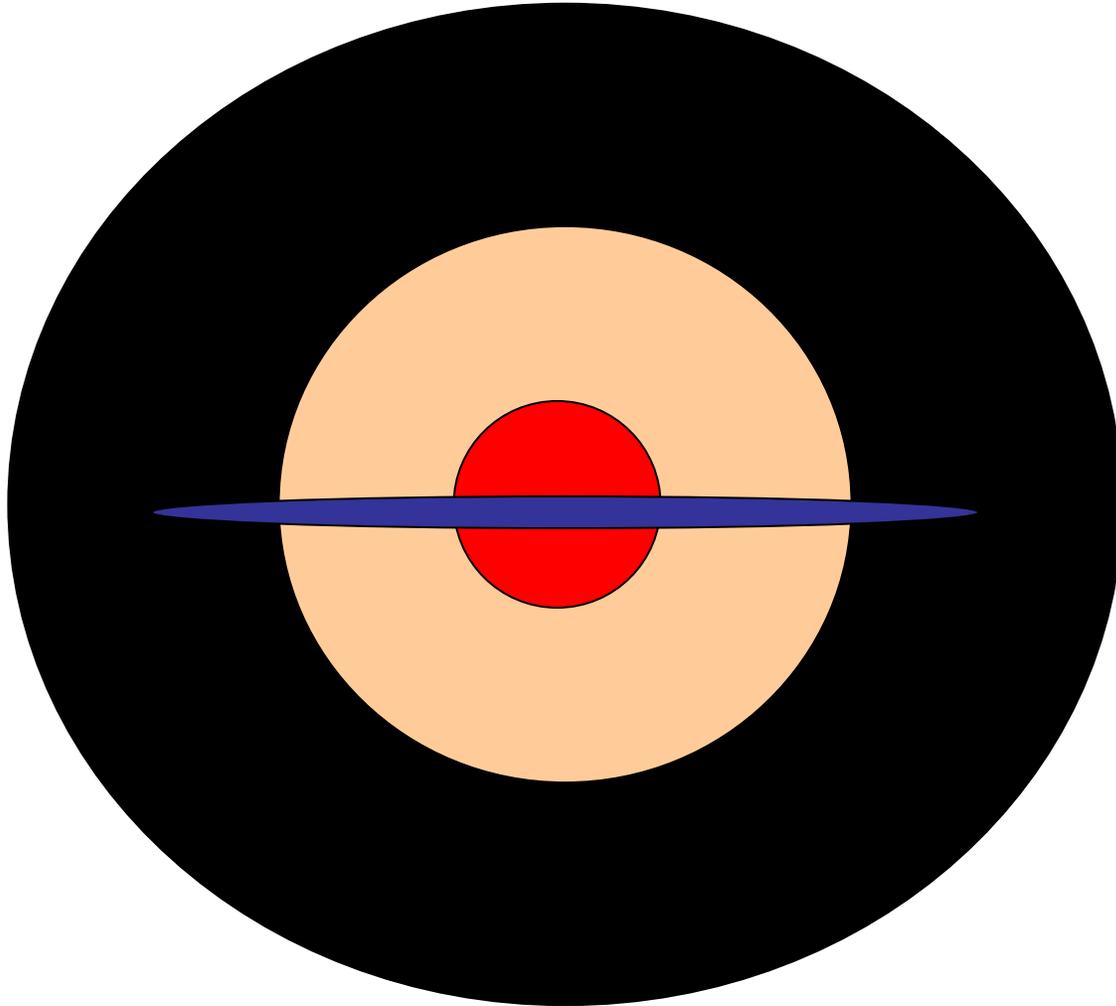
Hickson Compact Group 87



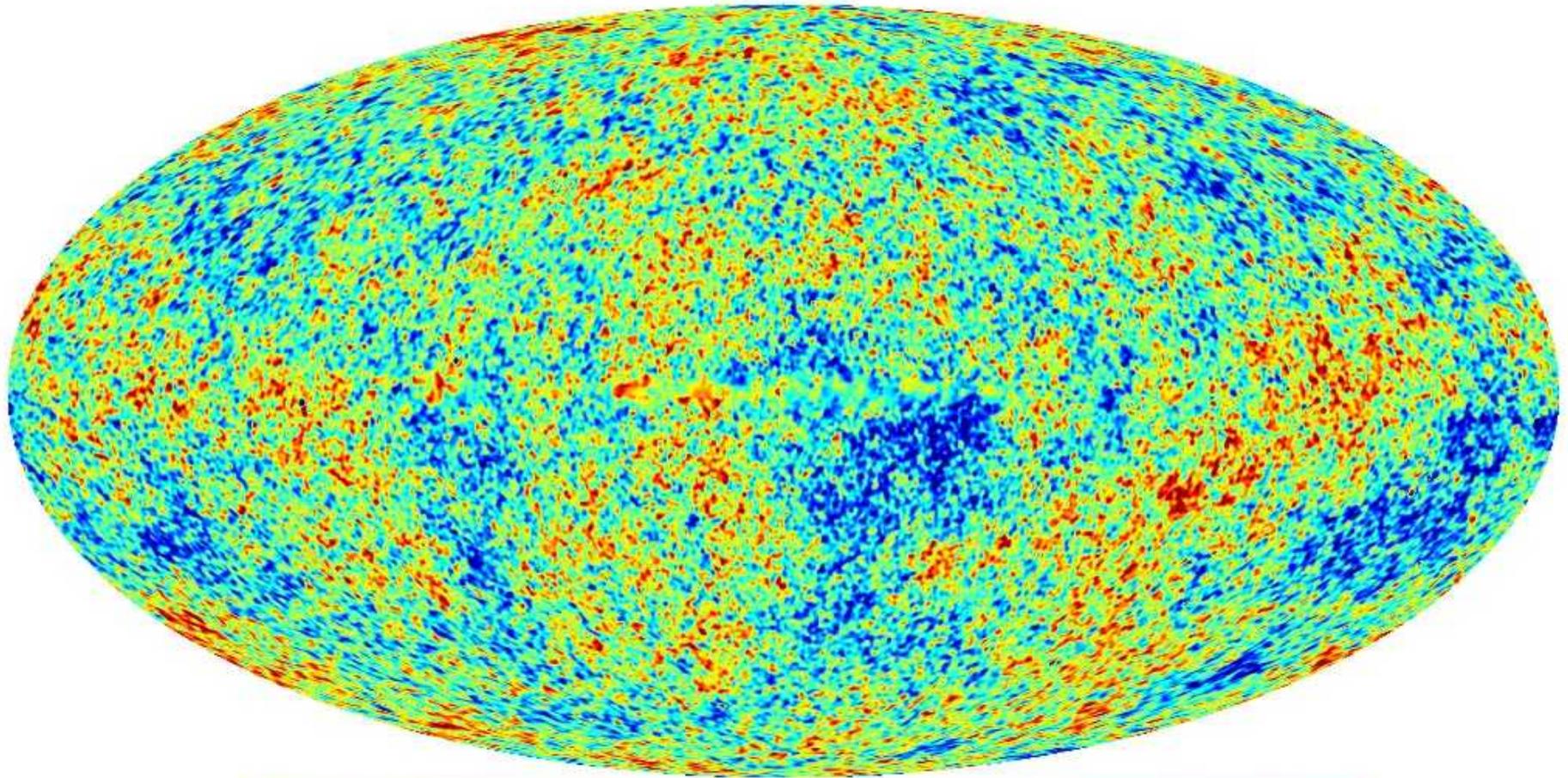
Formación y evolución de las galaxias



Anatomía de una galaxia



Poco después del Big Bang:

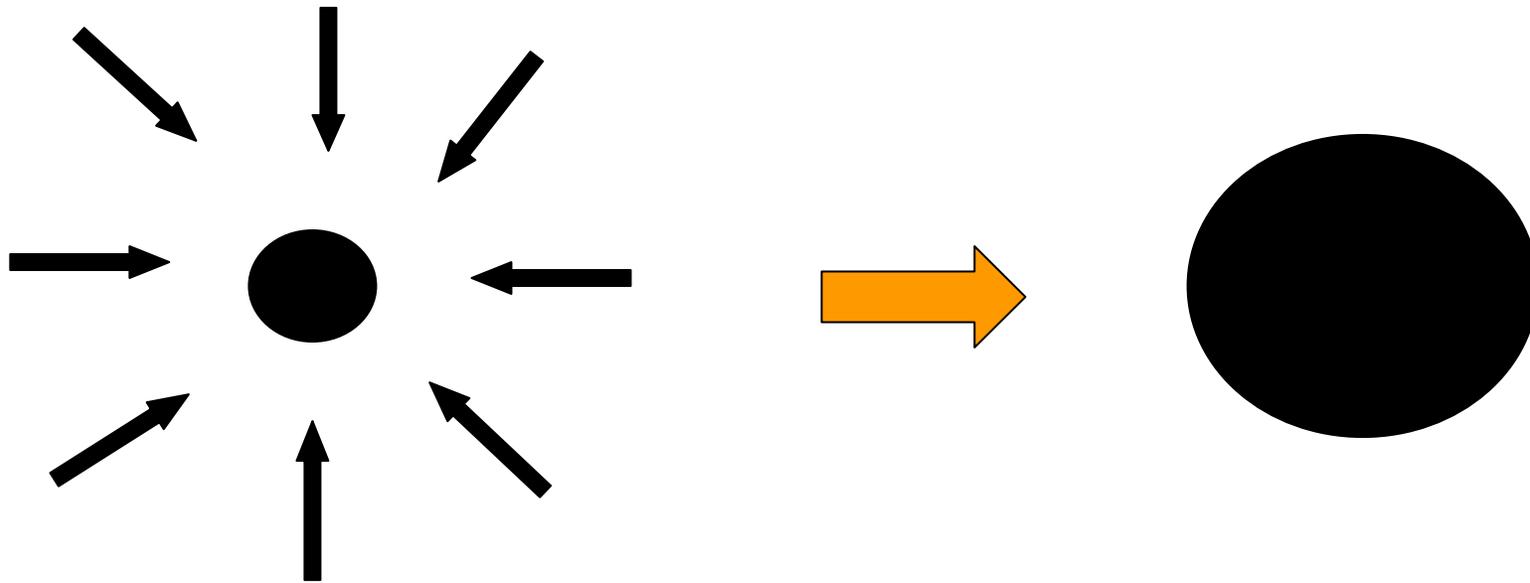


-200 μ K

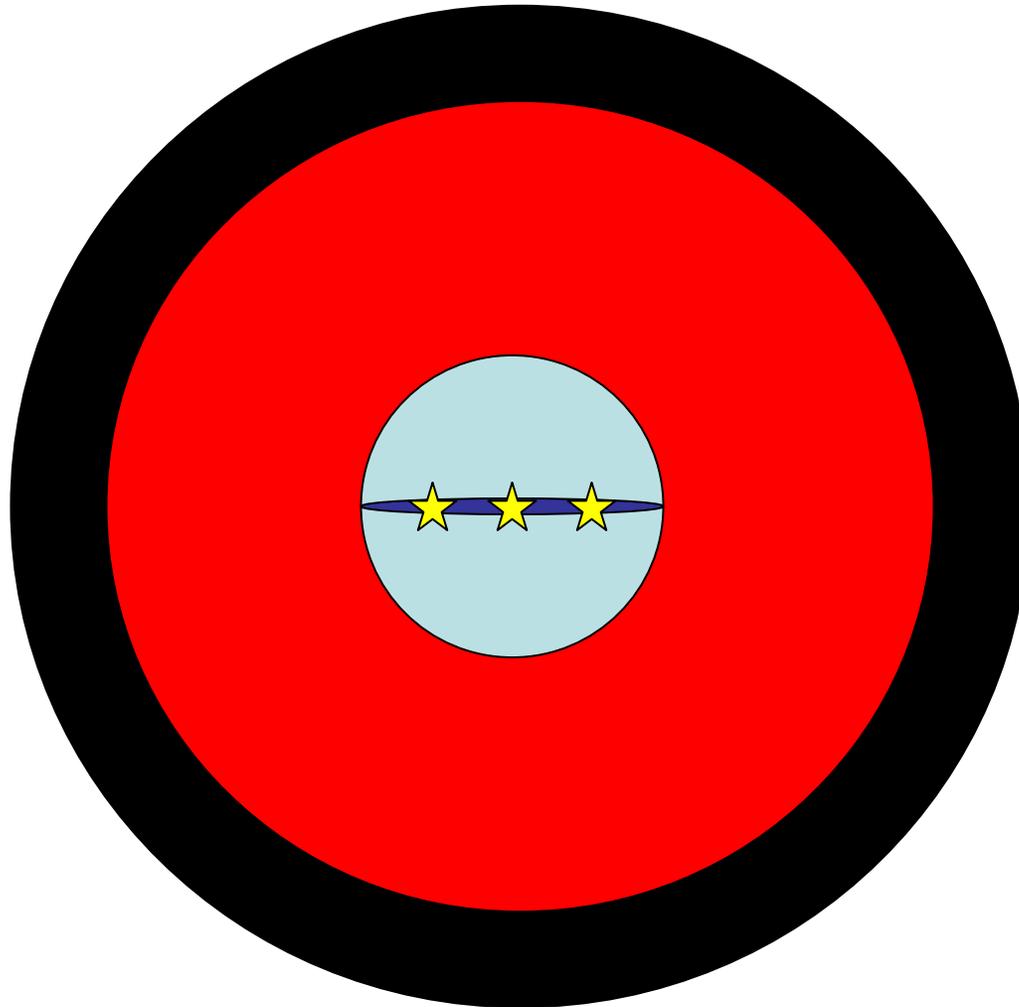


200 μ K

Inestabilidad Gravitacional



Enfriamiento del gas y formacion estelar







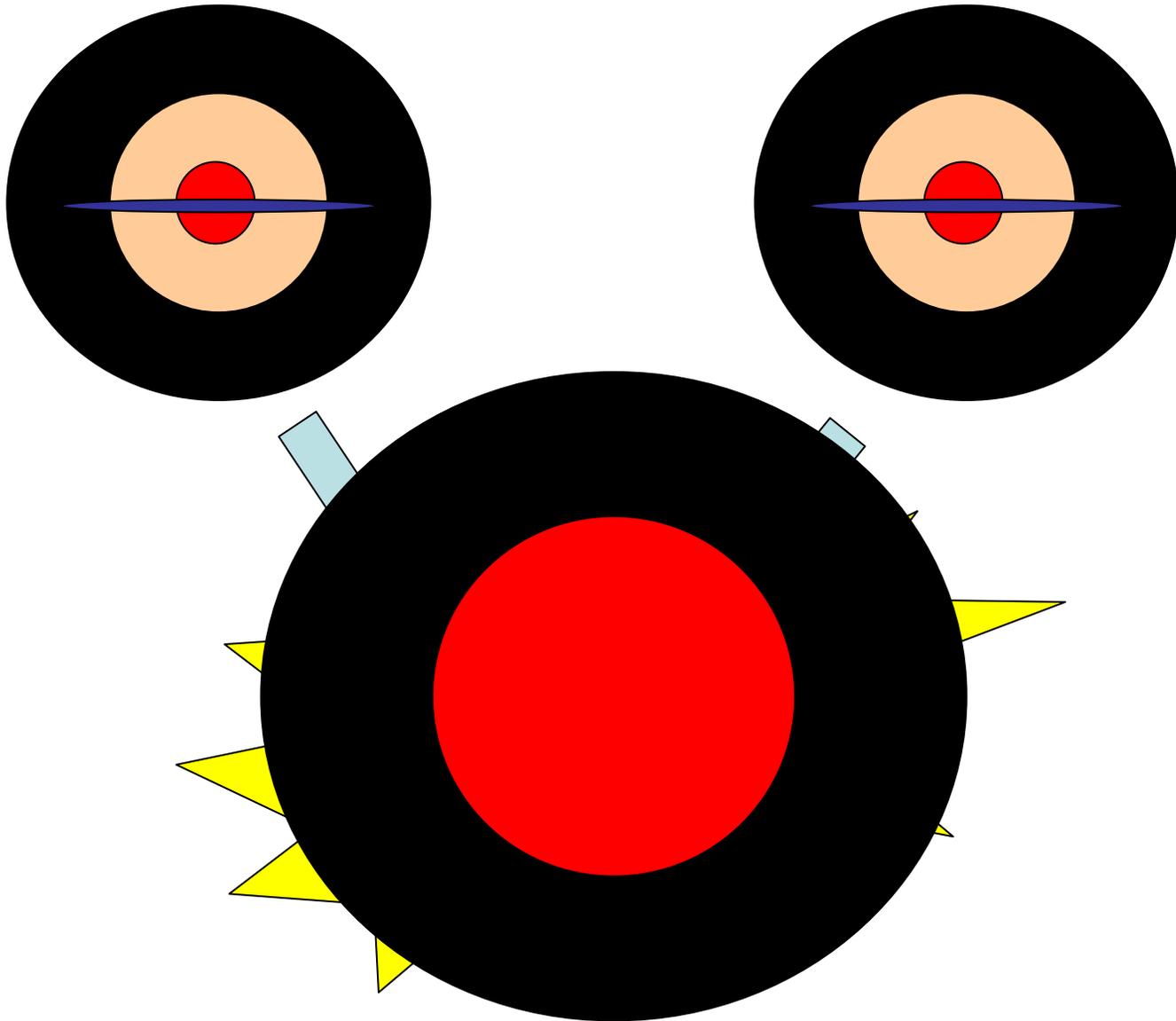
Película de merger de galaxias

Spiral Galaxy Pair NGC 3314

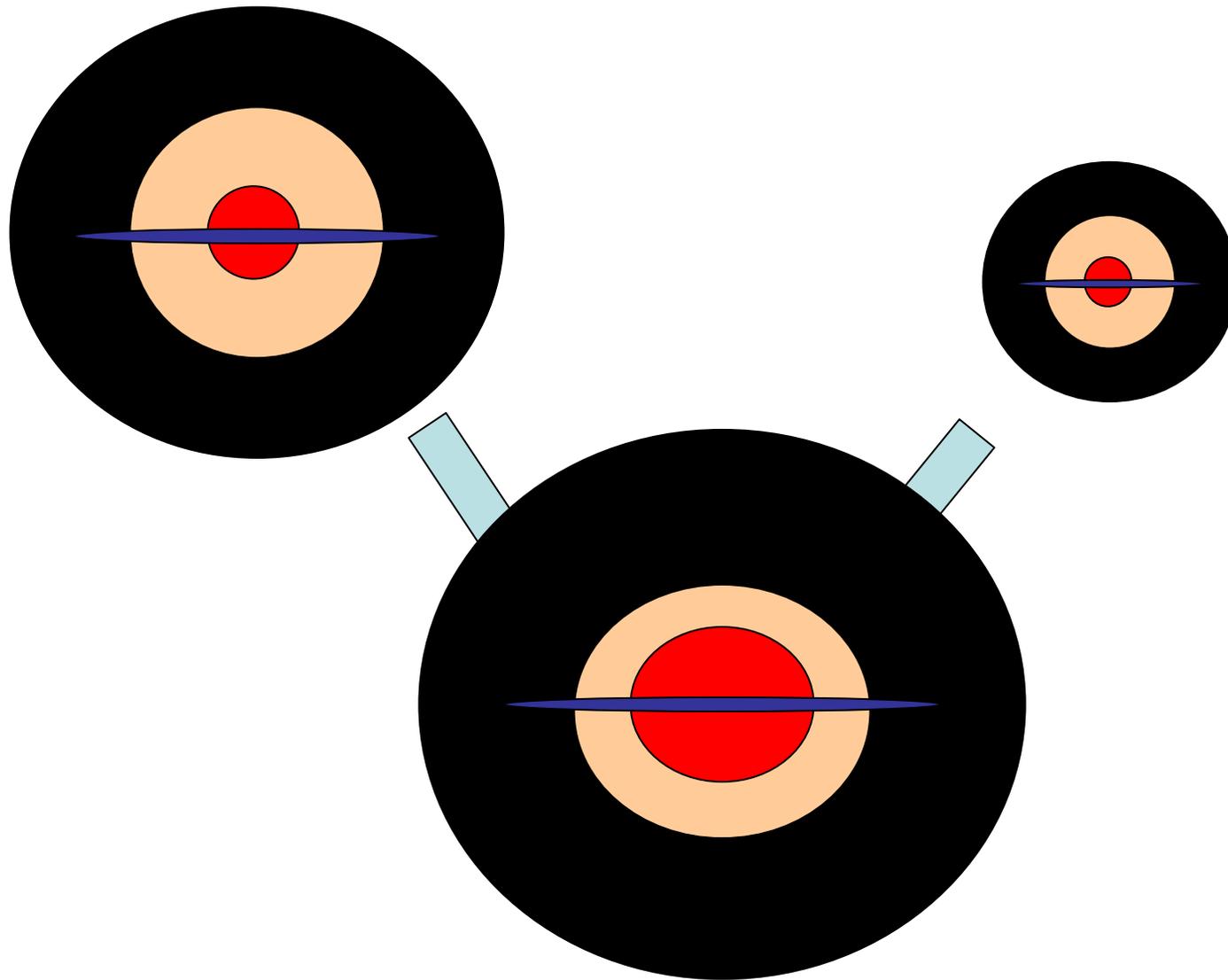


Hubble
Heritage

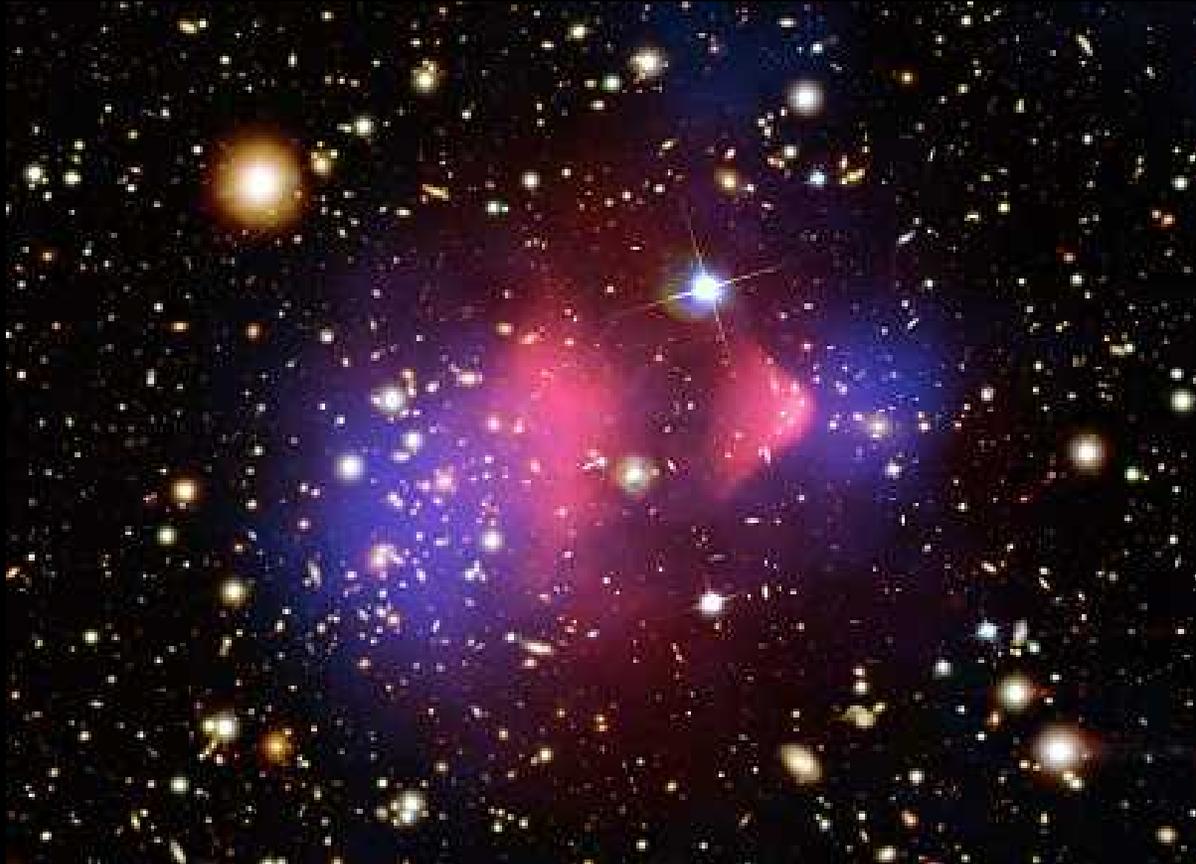
Fusiones de galaxias



Fusiones de galaxias II



Efectos ambientales



Pelliculita de galaxias en un cumulo
o ram pressure