

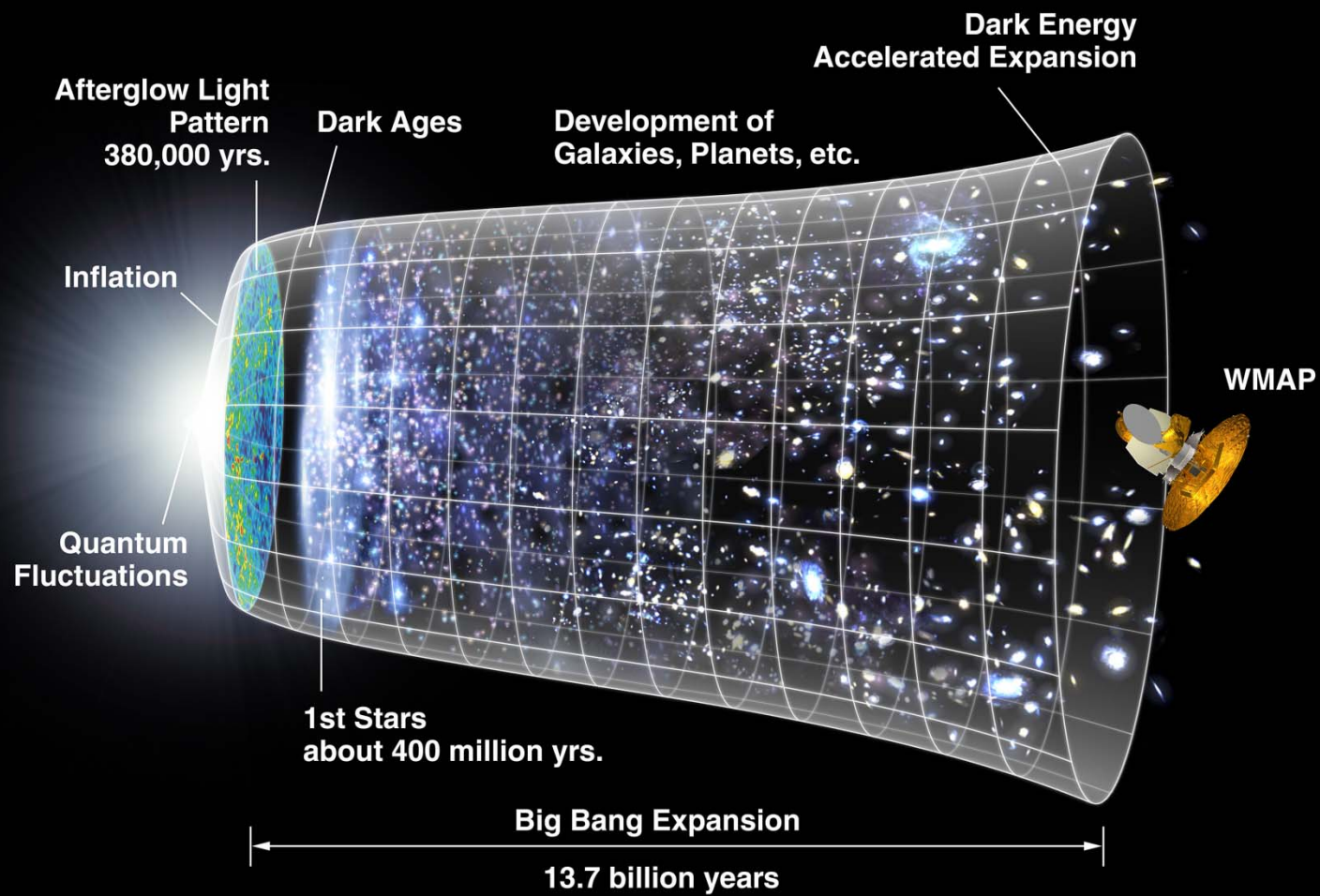
Astronomy 6000 – The High Redshift Universe

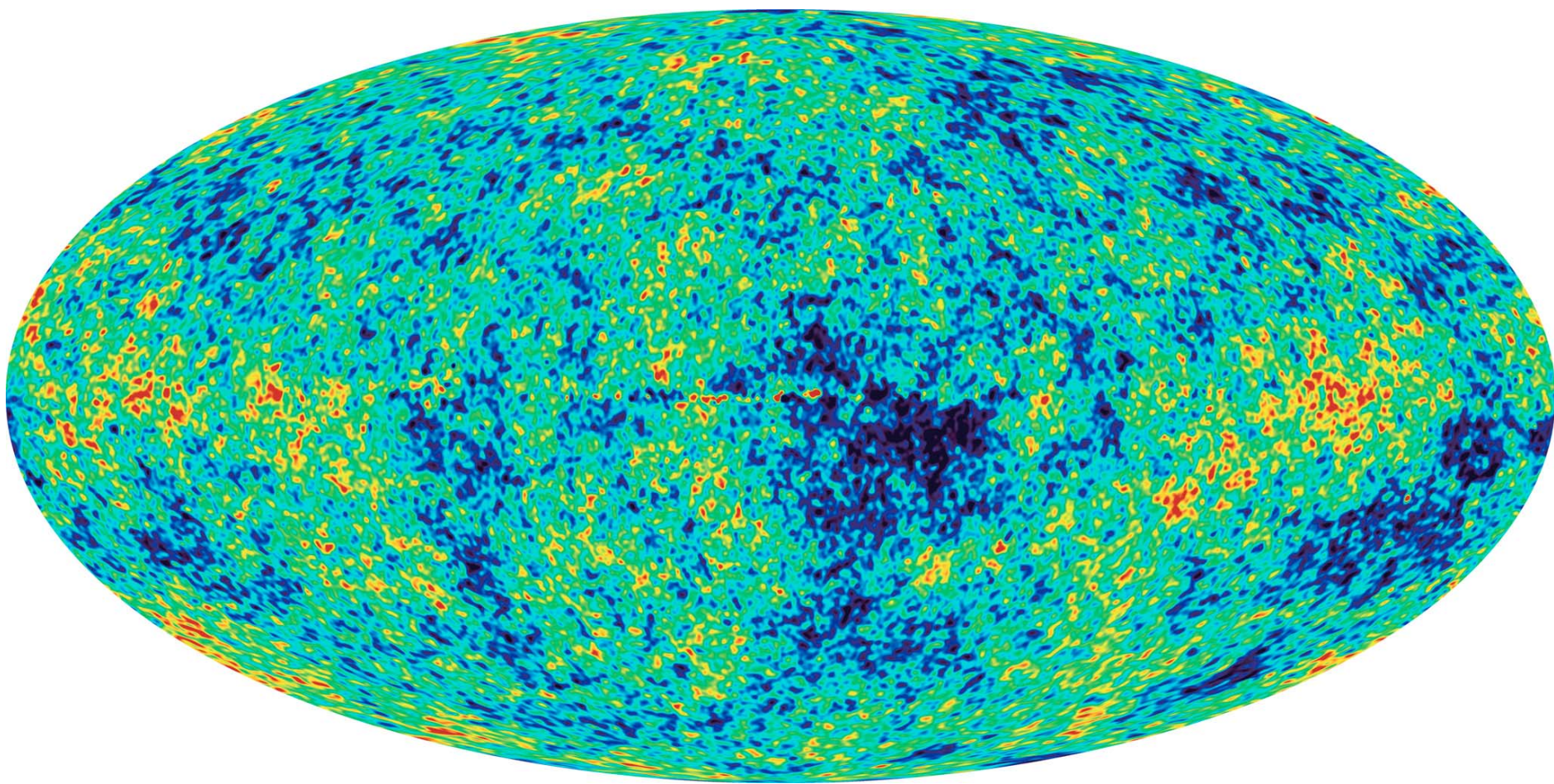
Nils Halveson

Jack Burns

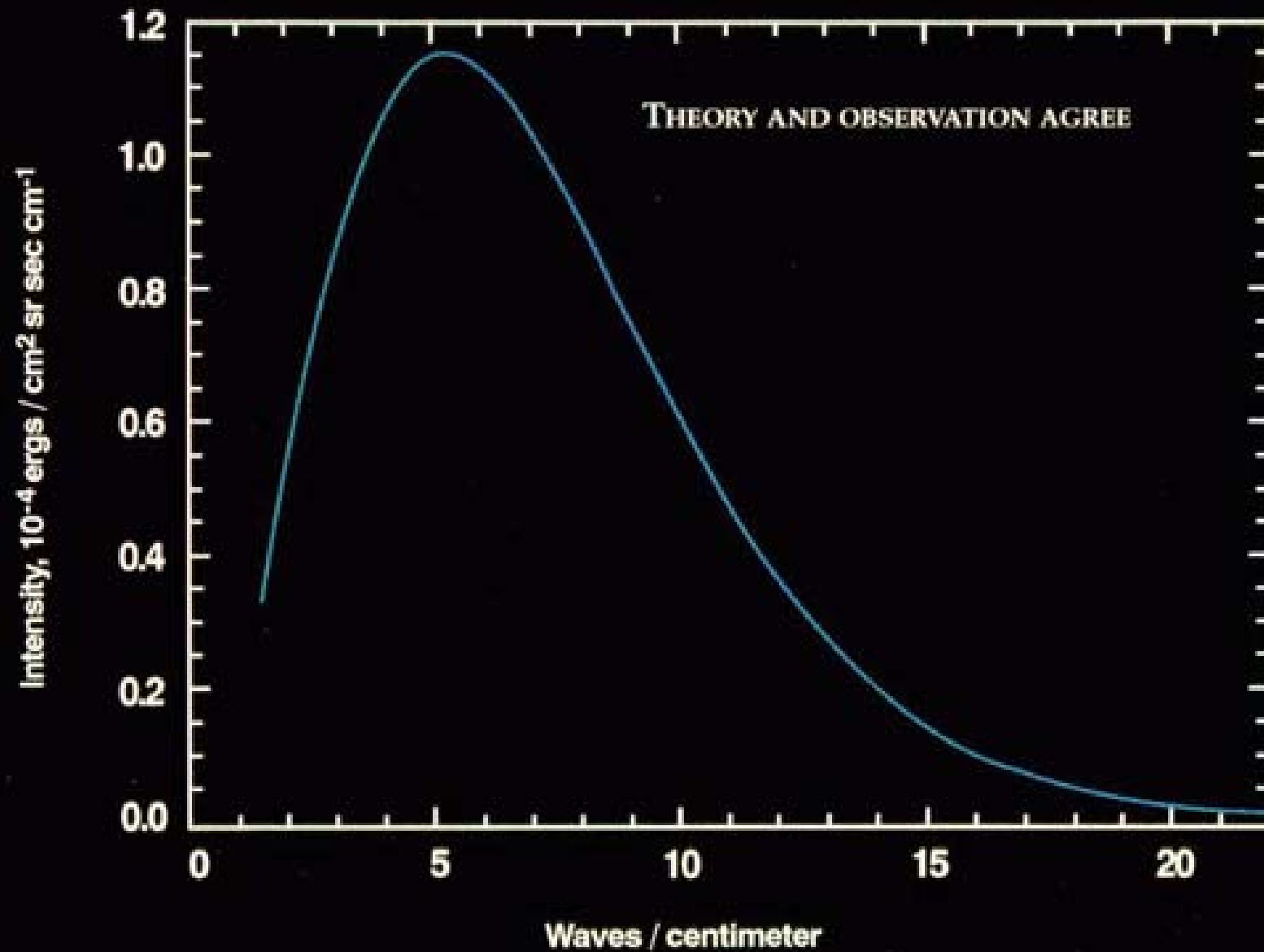
Geraint Harker

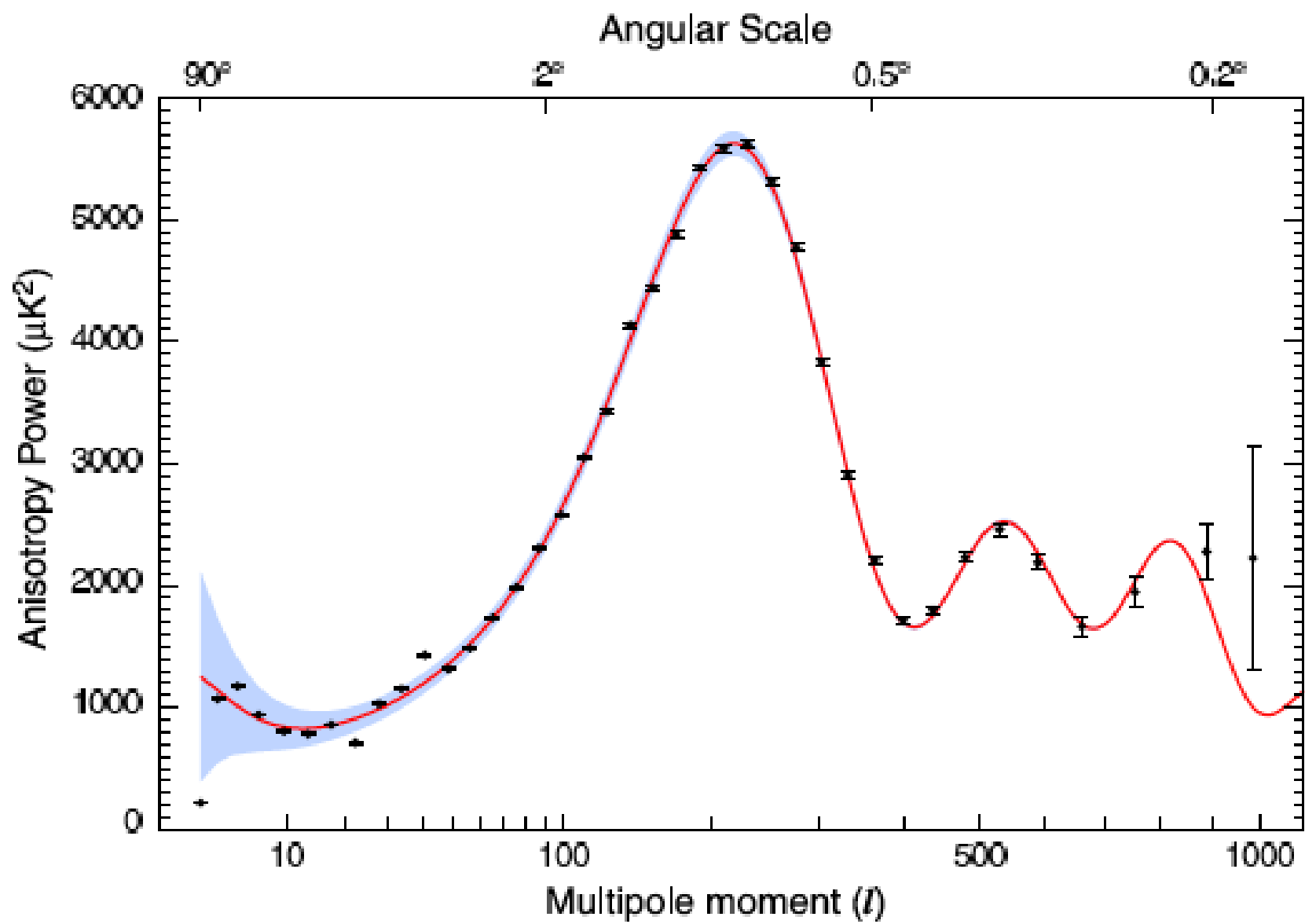
Class website: <http://lunar.colorado.edu/~jaburns/astr6000/>





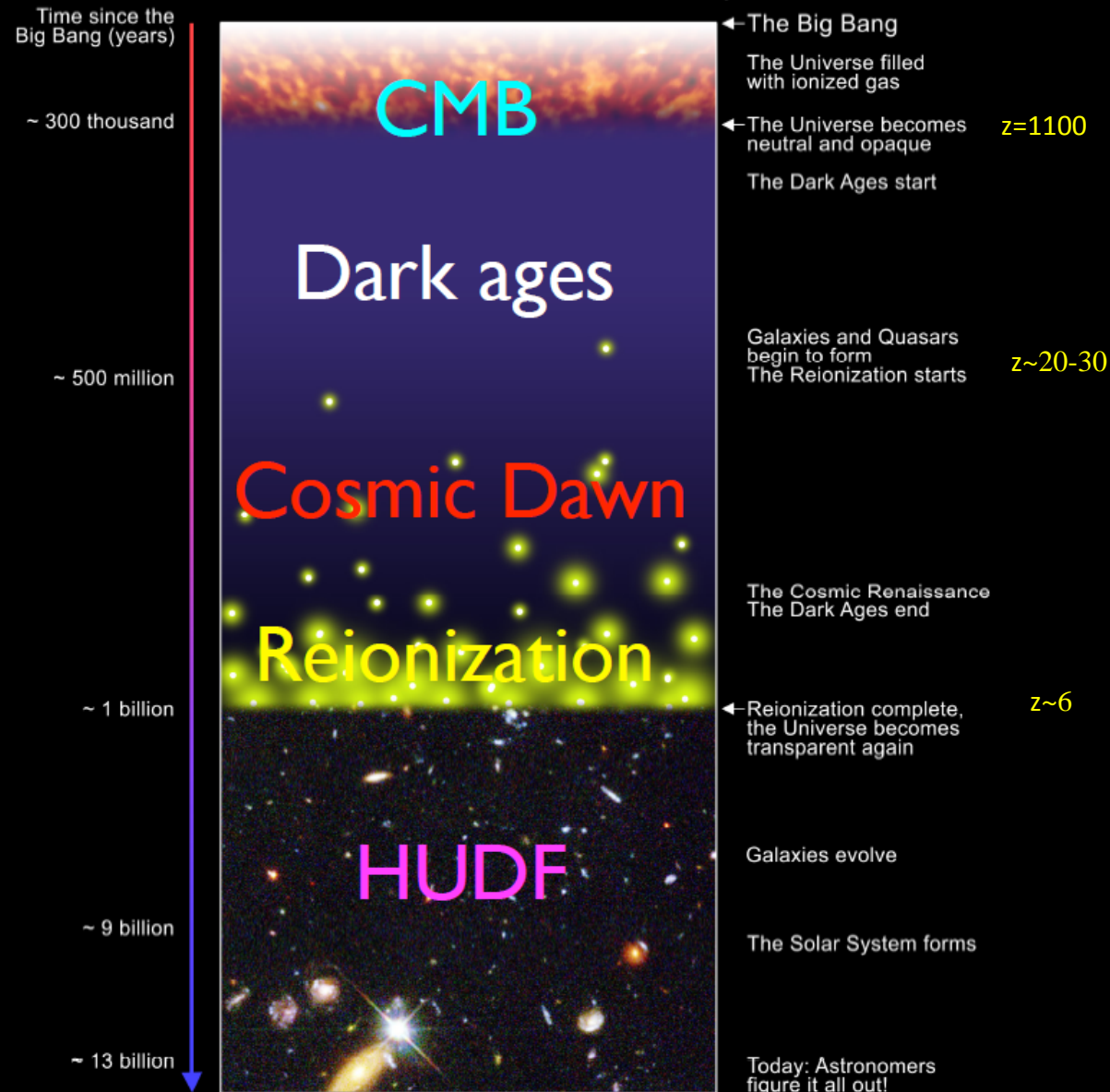
COSMIC MICROWAVE BACKGROUND SPECTRUM FROM COBE





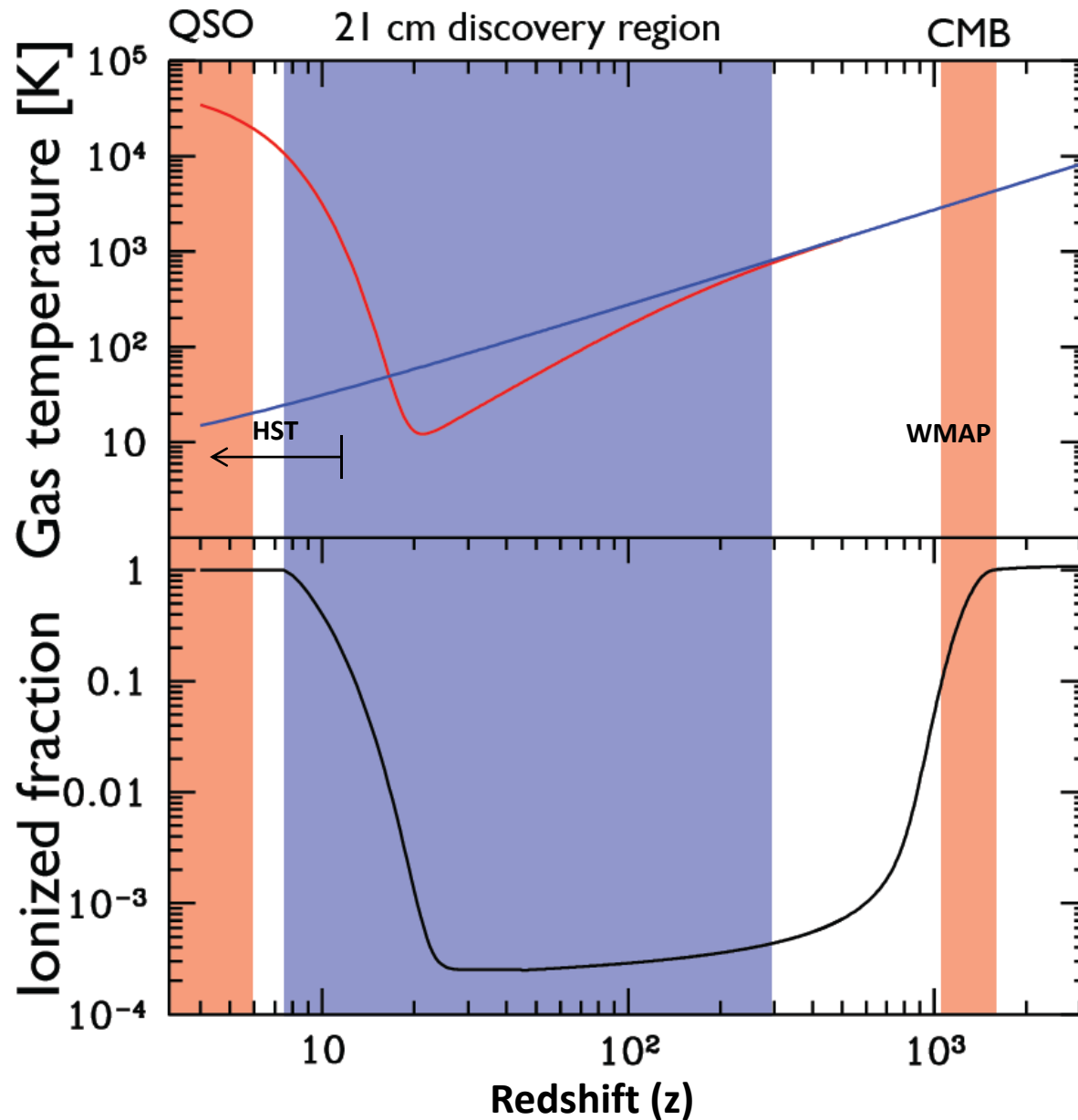
The First Billion Years

A Schematic Outline of the Cosmic History



S.G. Djorgovski et al. & Digital Media Center, Caltech

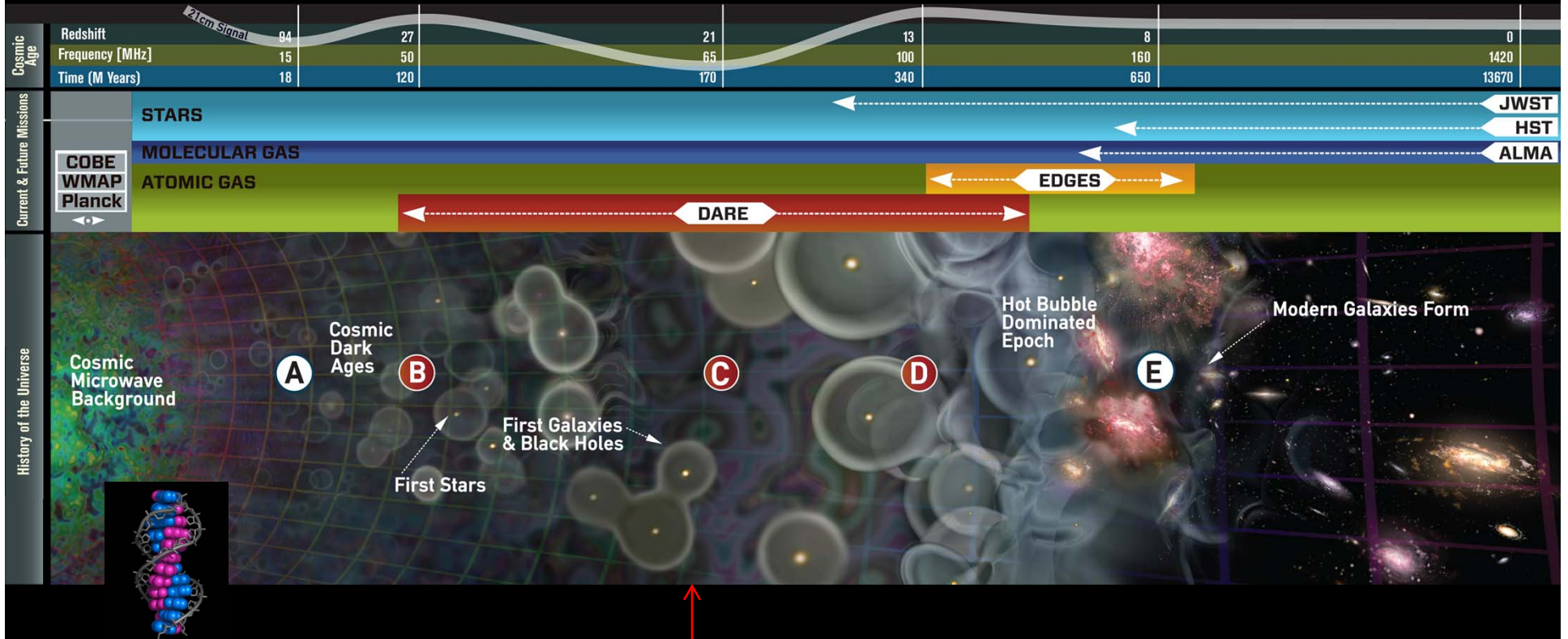
The Evolution of the IGM



We know nothing concrete
about the thermal history
of the Universe
between $z=100$ and $z=6$

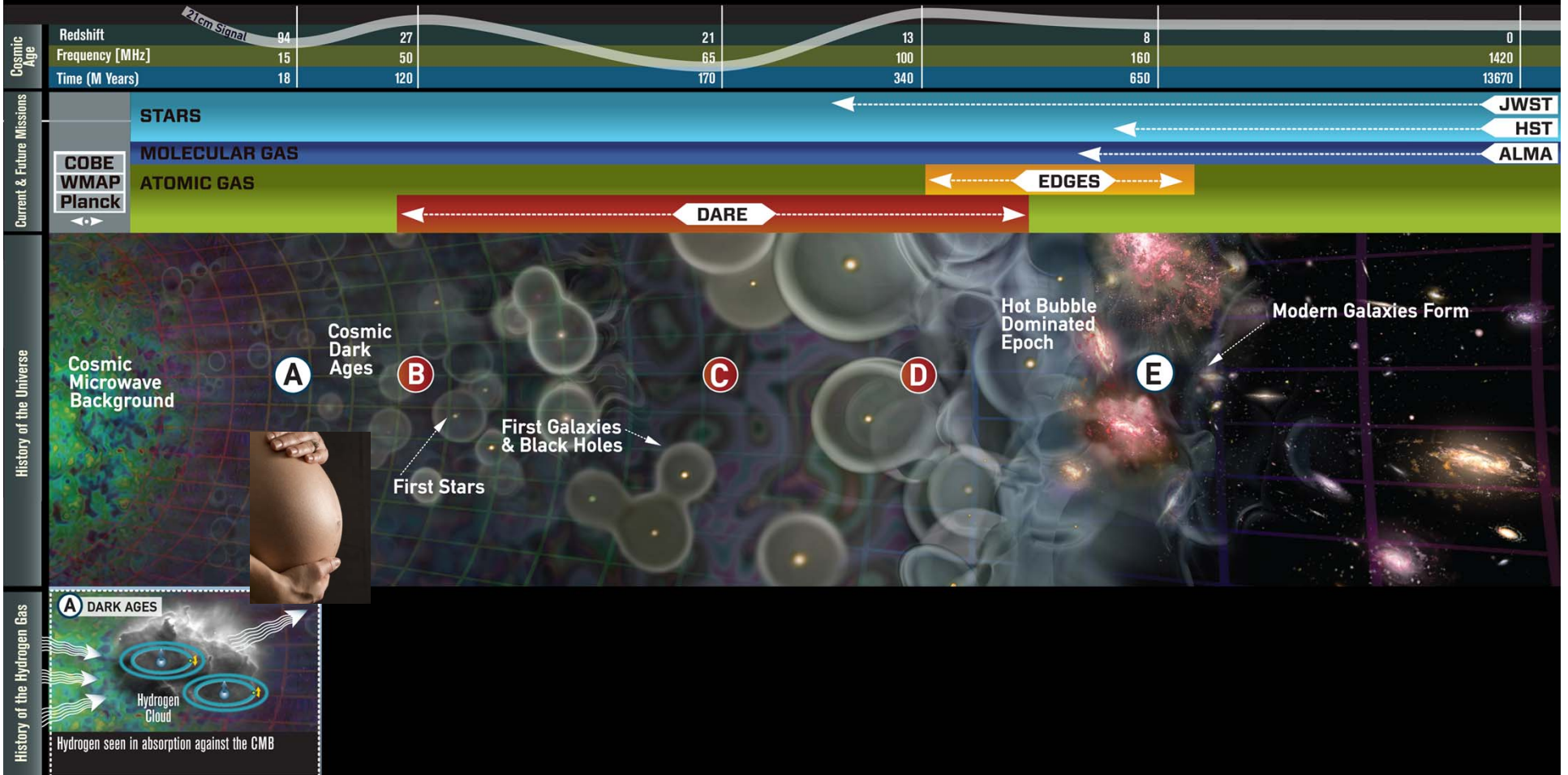
We know little or nothing
about galaxies
at $z > 10$

The History of Hydrogen

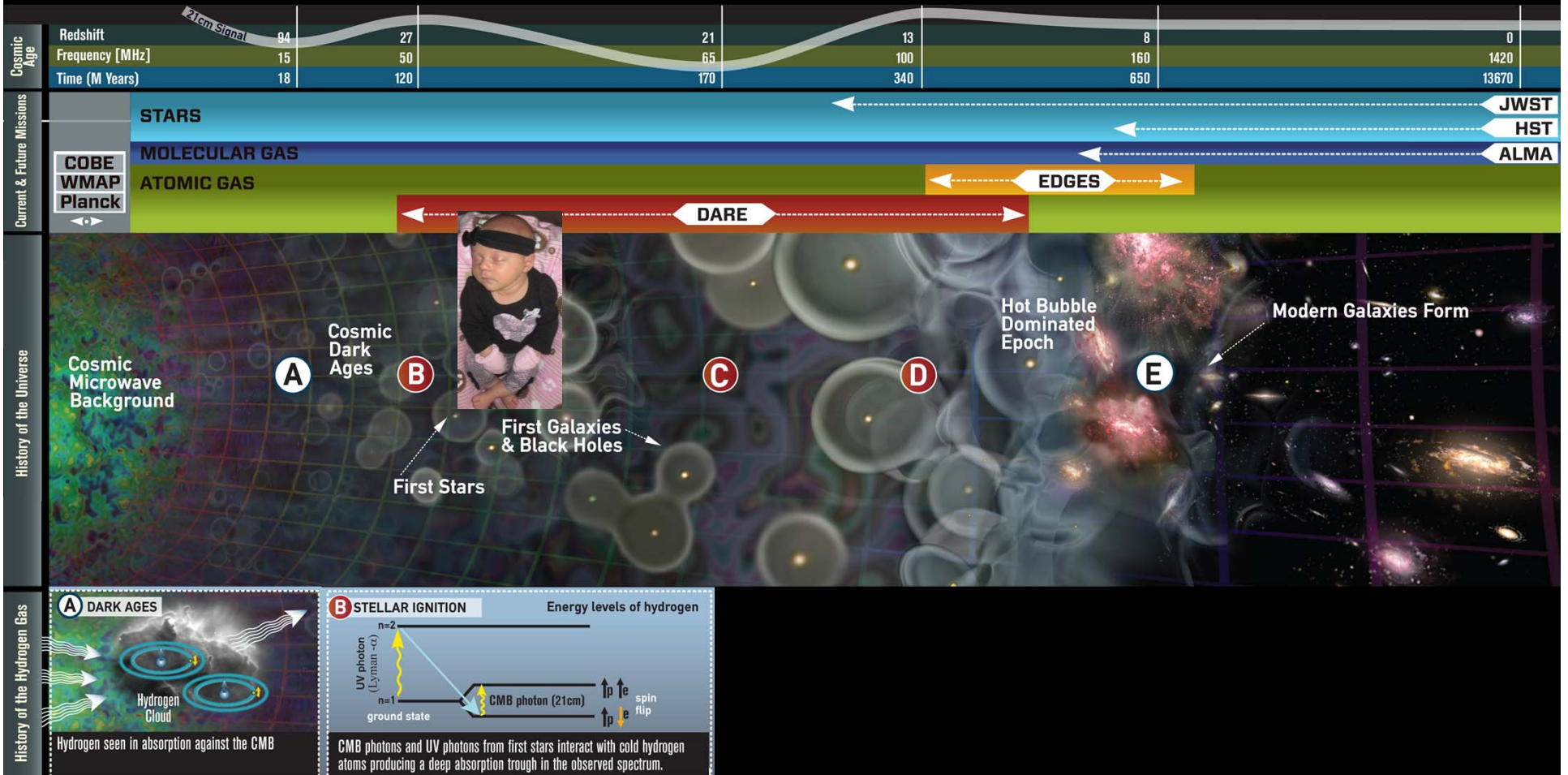


adapted from A. Loeb, 2006, *Scientific American*, 295, 46

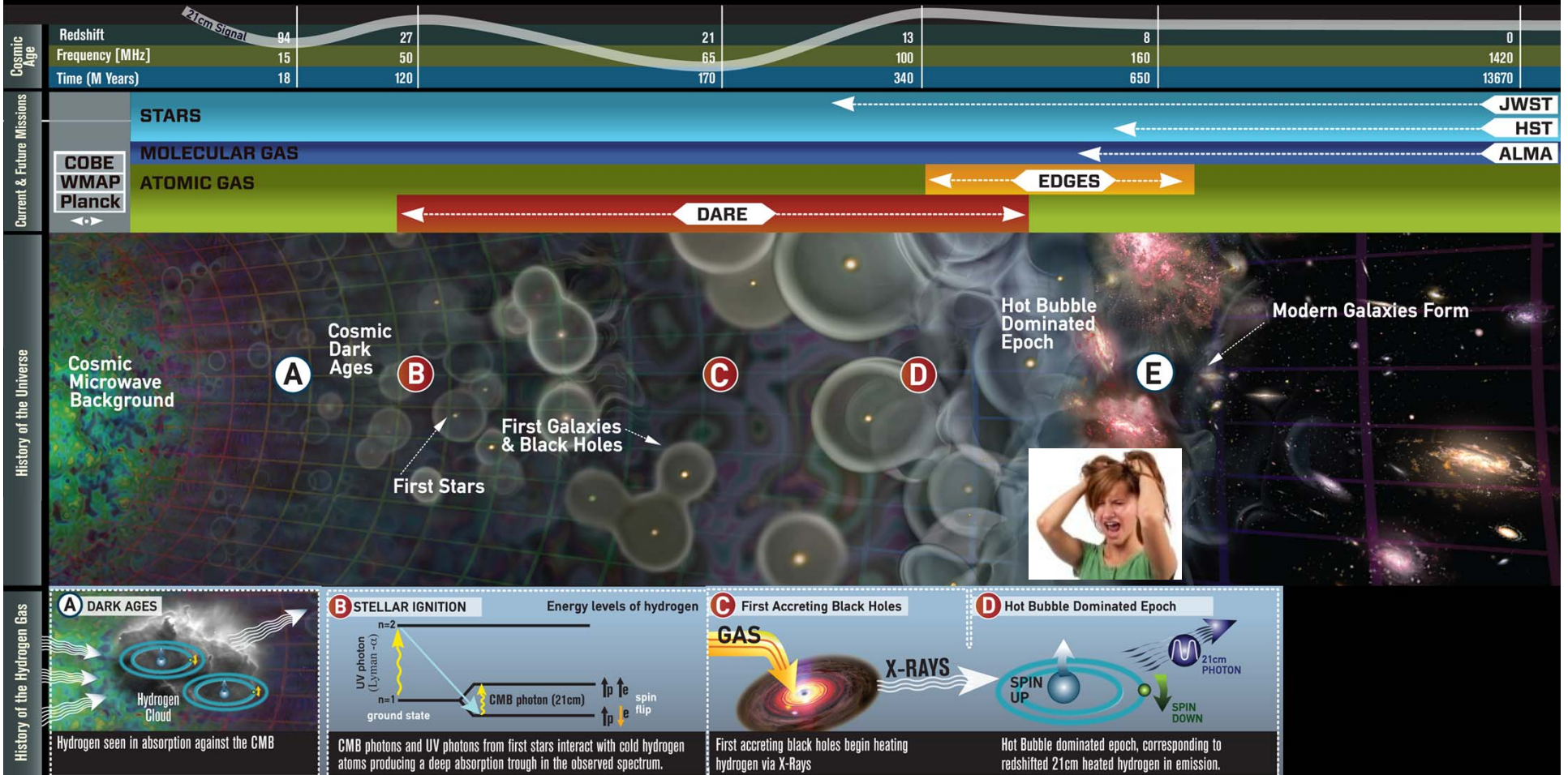
The History of Hydrogen



The History of Hydrogen



The History of Hydrogen



The History of Hydrogen

