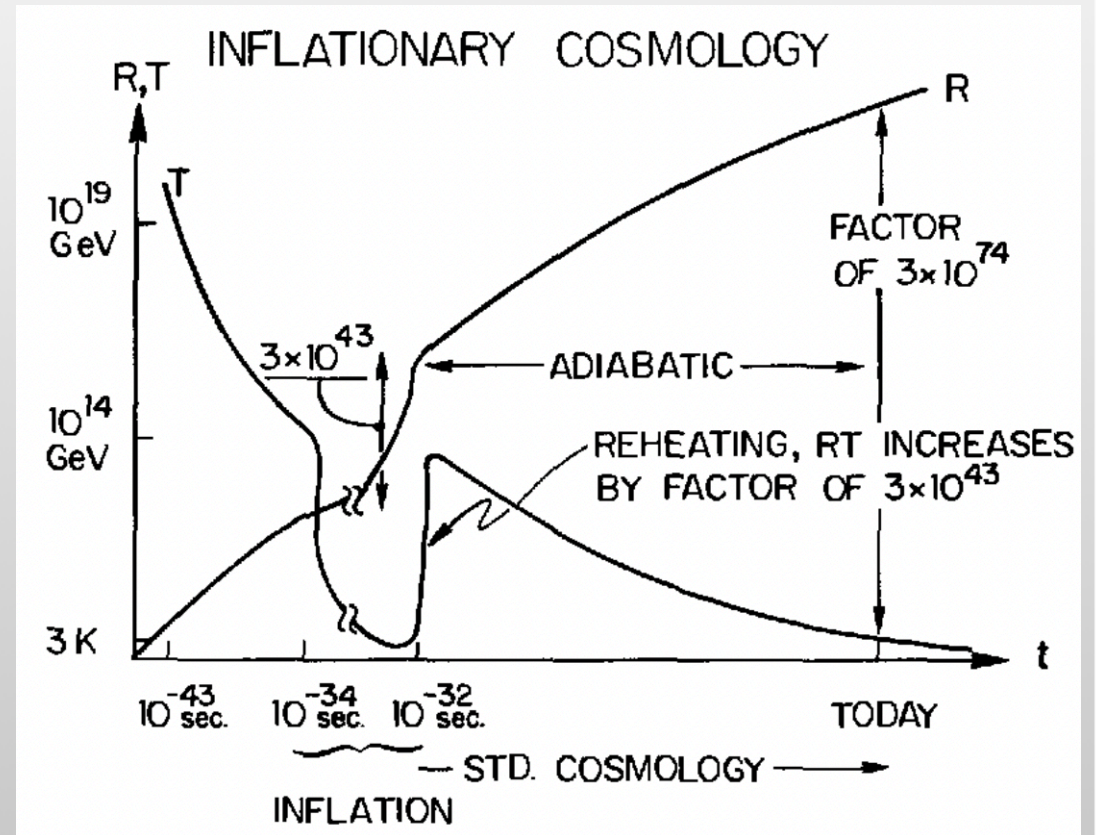
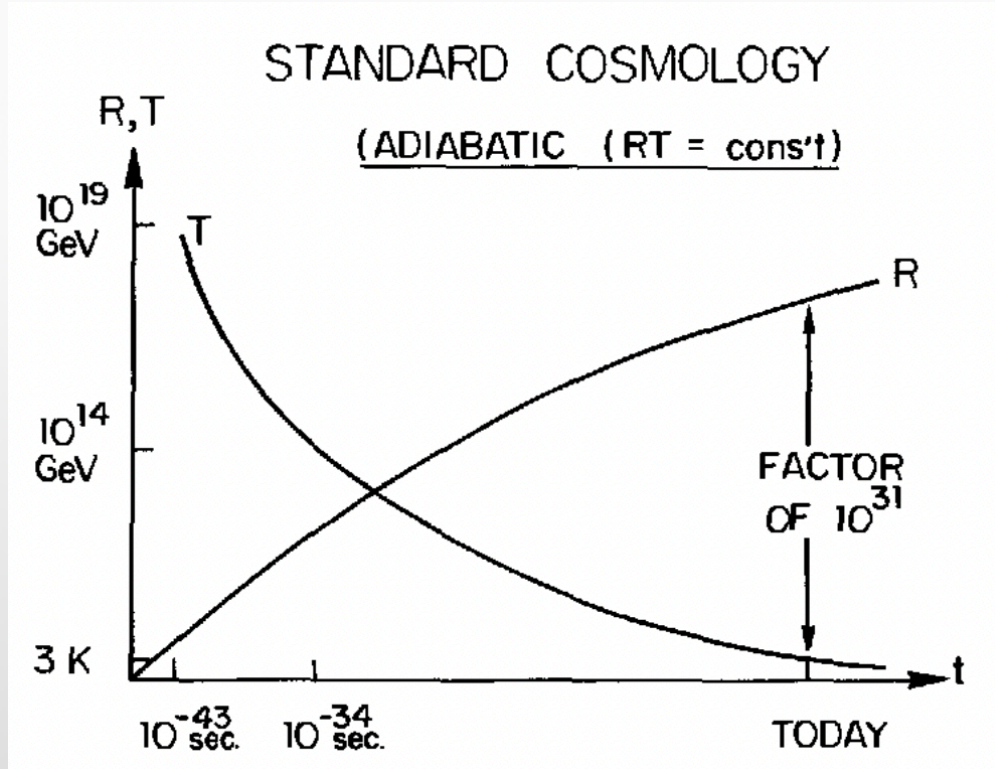
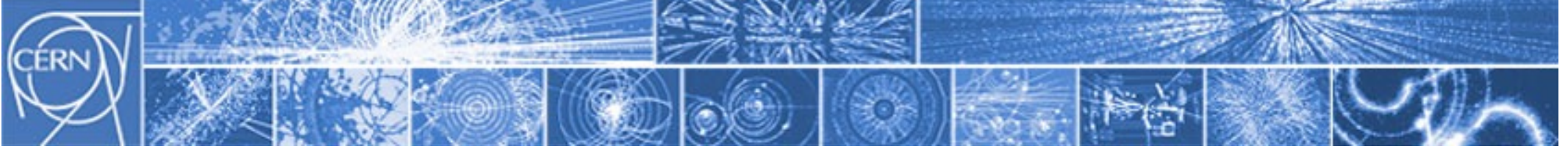


# Inflazione





# Inflazione

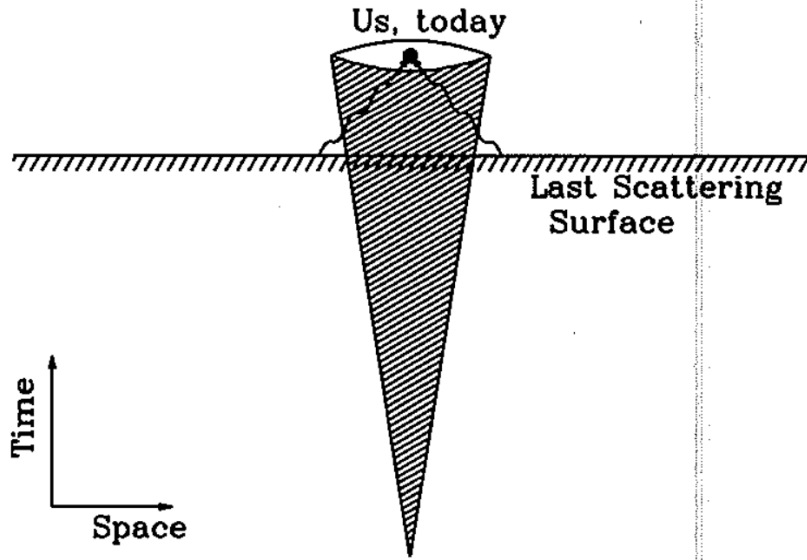


Figure 6.2. The horizon problem. The region inside the cone at any time is causally connected to us (at the center). Photons emitted from the last scattering surface (at redshift  $\sim 1000$ ) started outside of this region. Therefore, at the last scattering surface, they were not in causal contact with us and certainly not with each other. Yet their temperatures are almost identical.

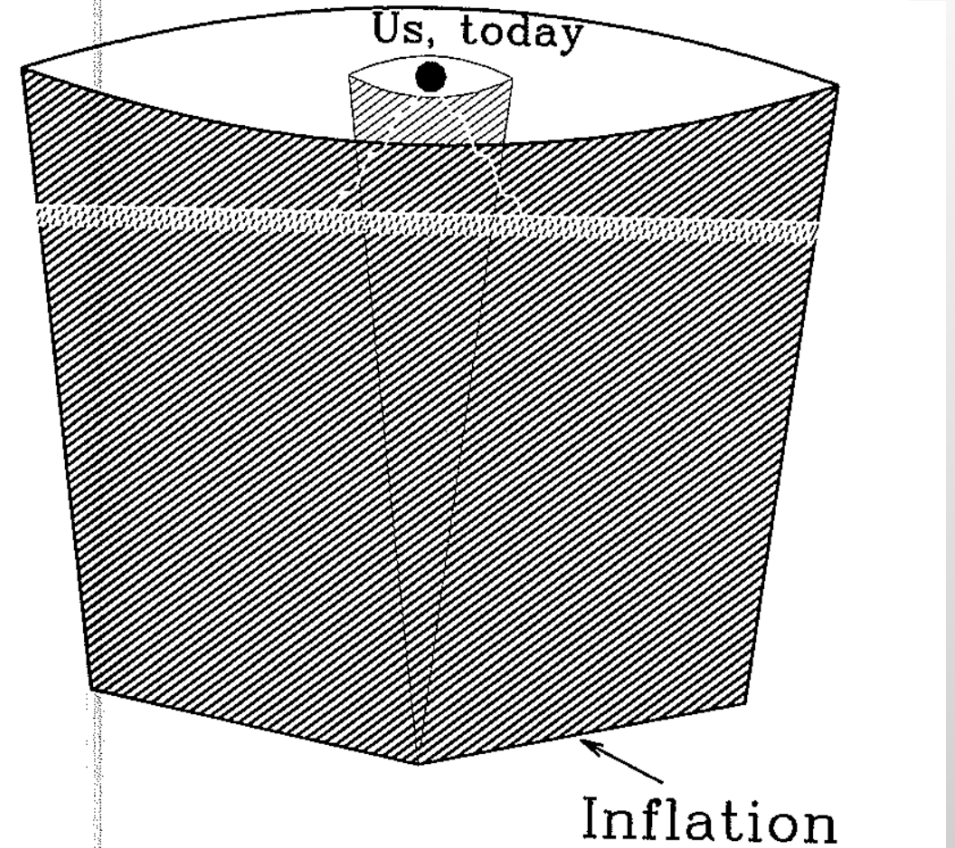


Figure 6.5. Inflationary solution to the horizon problem. Larger cone shows the true horizon in an inflationary model; smaller inner cone shows the horizon without inflation. During inflation, the physical horizon blows up very rapidly. All scales in the shaded region were once in causal contact so it is not surprising that the temperature is uniform.