

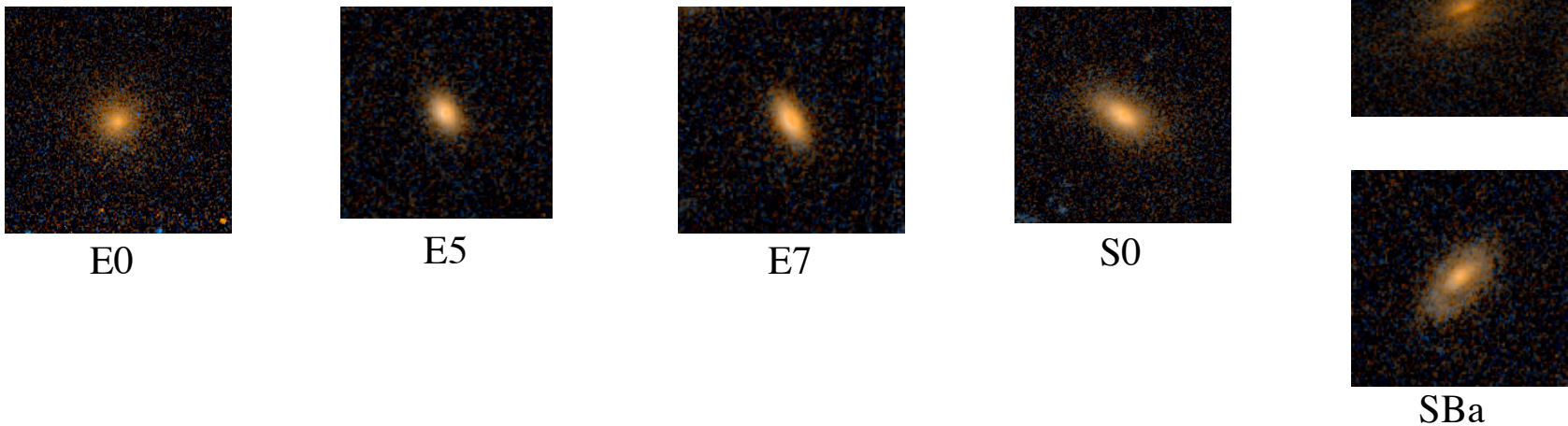
Evolution of the Early-type Galaxy Luminosity Function Since $z=1$

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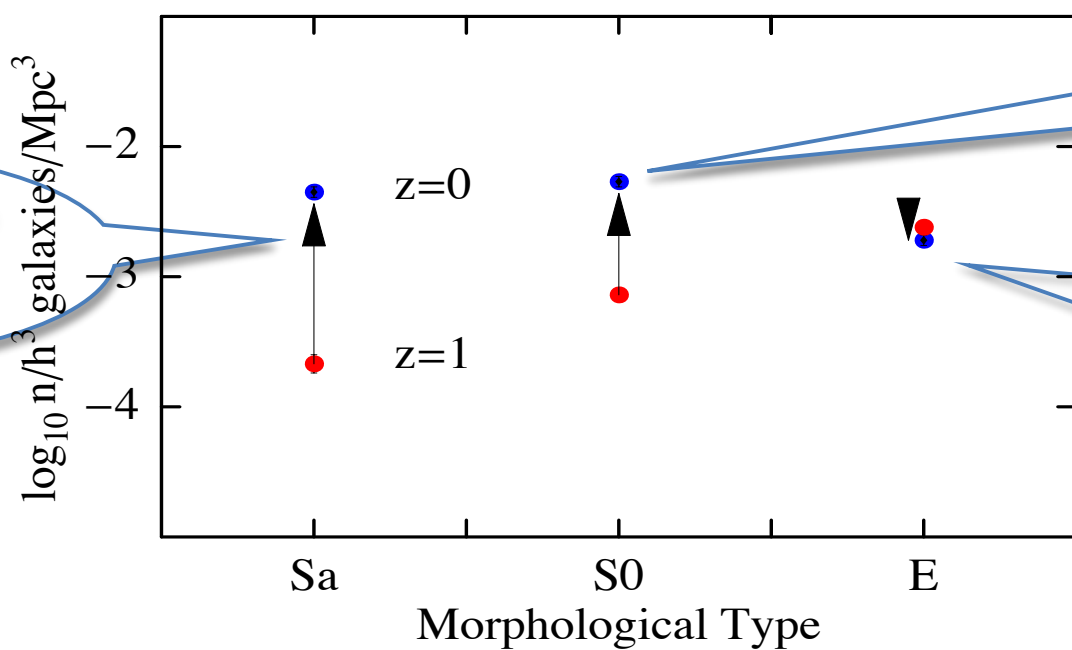
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Matt Ashby (SAO), Christopher Willmer (U. of AZ).

Hubble Tuning Fork Diagram at $z \sim 1$

Wow! Look at that! - the Hubble sequence has emerged at $z \sim 1$, at least the early-type galaxies. **But**, they are not there in the same numbers as at $z=0$.



Comoving Volume Number Densities at $z \sim 1$ and $z=0$

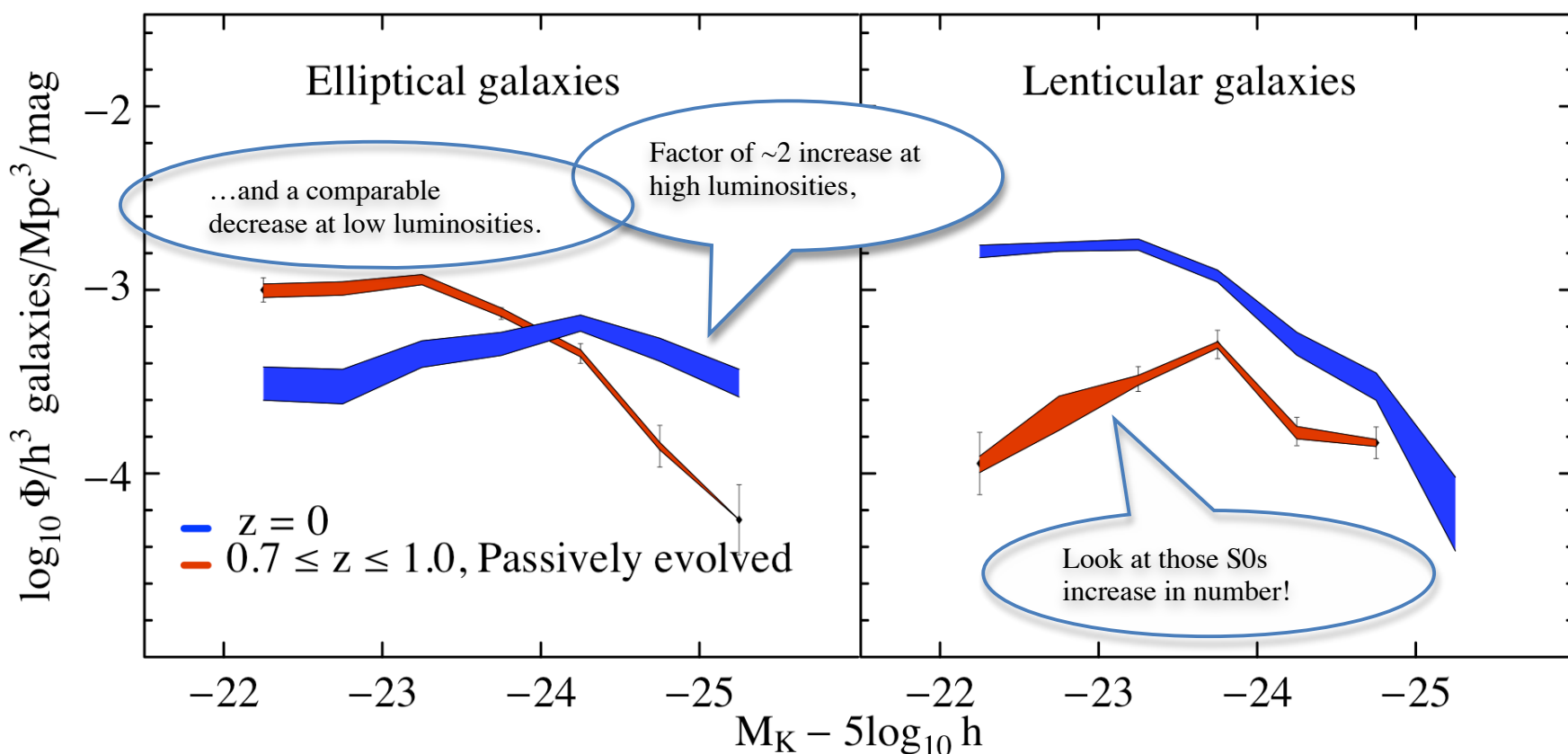


The number of Sa galaxies has increased by an astonishing factor of ~ 20 since $z \sim 1$.

The number of S0s increased too, by a factor of ~ 7 since $z \sim 1$.

But what's going on with those ellipticals? They went down? Yes, but only a bit.

Rest Frame K-Band Luminosity Functions at $z \sim 1$ and $z=0$



Sadly, there's too few Sa galaxies at $z \sim 1$ in the EGS field to plot their LF. But stay tuned, we're doing the COSMOS field next!

