

Swimming Against the Tide

Tidal flow of water as an analogy for Hubble flow of the Universe

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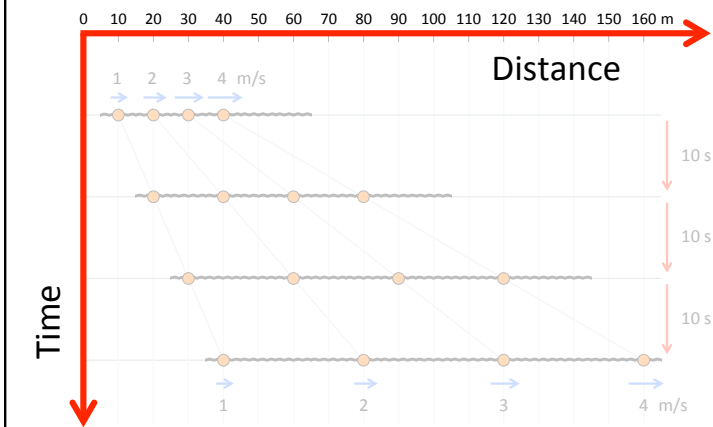
If a galaxy is receding from us at twice the speed of light ($v=2c$) how can its light ever reach us?

The following slides show how using an analogy ...

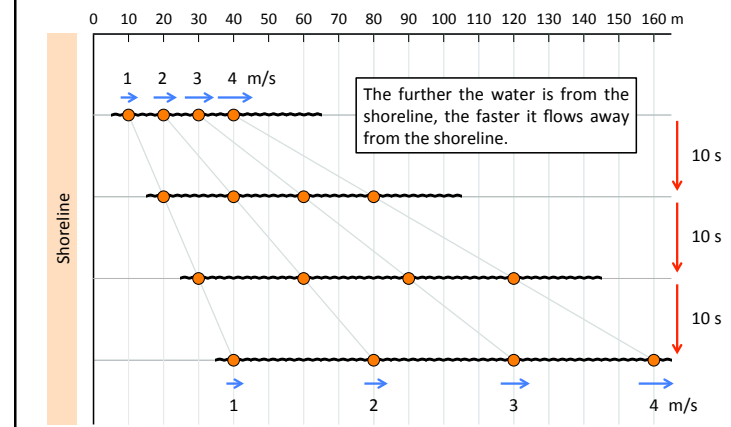
A person (*light*) swimming through water (*space*) that is flowing (*expanding*) faster than the person can swim (*the speed of light*).

The swimmer (*light*) is initially 'dragged backwards' by the receding tide (*expanding space*) but eventually makes it to the shoreline (*us*).

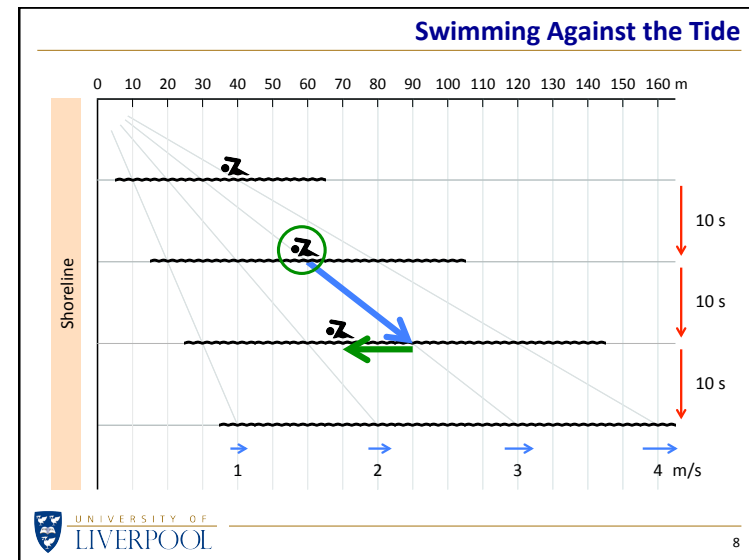
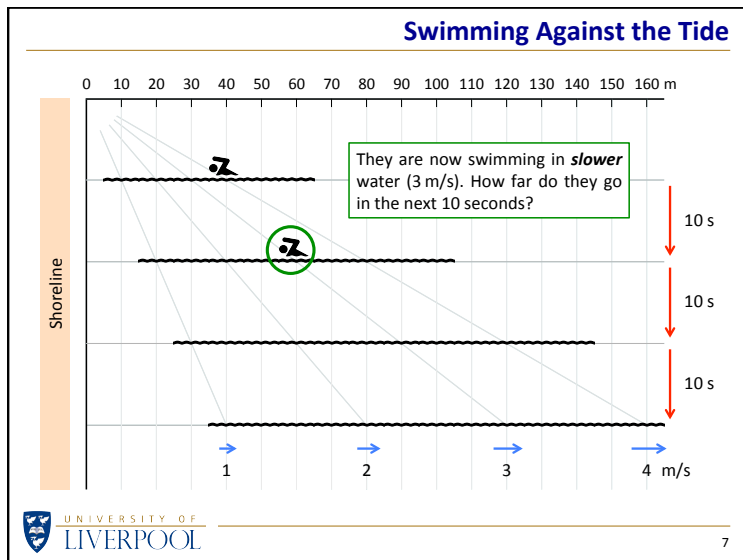
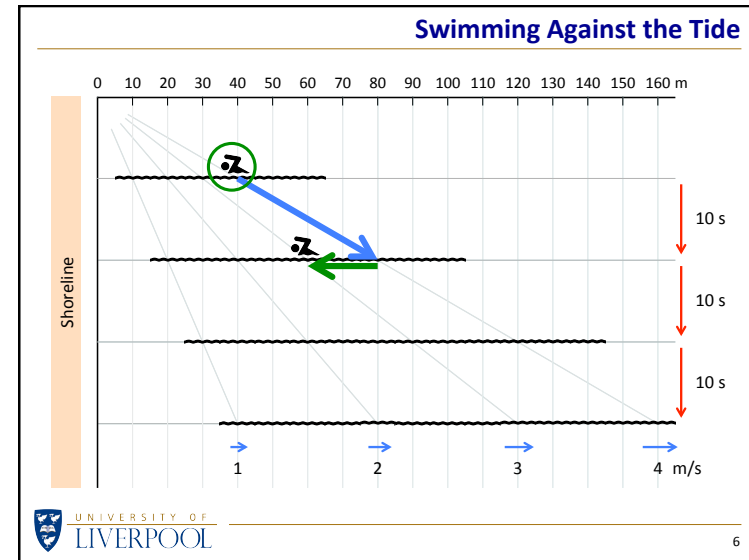
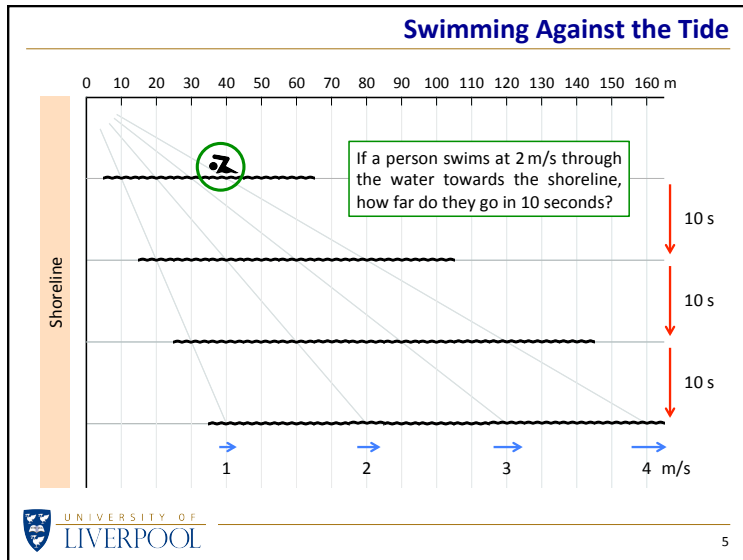
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