ARE THERE GHOST IMAGES OF THE COMA CLUSTER AT OTHER REDSHIFTS?

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The topology of the Universe is a fundamental property of our Universe according to Friedmann-Lemaître models[3, 9, 7], but has not yet been reliably measured. As pointed out by Sato[12], the Universe may be finite even though flat or negatively curved: $k \leq 0 \not\Rightarrow$ infinite volume of a hypersurface.

Turner[13] listed different questions of physics which cosmologists must address. A significant detection of non-trivial topology could bring quantum cosmology into the realm of observational astronomy.

Ellis[4] argued that any alternatives to the standard model should make observationally refutable predictions. Topology is usually considered within the *standard* model (e.g., [6, 5]). Nevertheless, any specific candidate topology makes refutable predictions, given appropriate telescope time. Proof that the candidate ghost images of the Coma cluster at $z \sim 0{\cdot}45$ [11] are not Coma is in principle straightforward.

However, serious tests for constraining non-trivial topology (e.g. [8, 10, 2]) require large scale programmes, just as for Ω_0, Ω_b and H_0.

Burbidge[1] commented about sociology: it is left to the reader to judge whether or not non-trivial topology is politically correct.

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