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## "Science is undermined every time we let ideology substitute for actual truth" - Ethan Siegel

*Thursday, 4 November 2021 10:00 (30 minutes)* 

I will discuss The following ideas that have reached dogma status,

- 1) The universe is approximately conformally flat and isotropic,
- 2) Black holes have singularities, and evaporate,
- 3) Entropy can be generalised to GR.

Last year I showed that the Kerr metric, either ingoing or outgoing, contains light rays whose affine lengths are finite and yet they do not end at some singularity. This destroys all the singularity theorems as they assume this cannot happen. I was then told that the "singularity" exists in the maximal extension, say in Kruskal. I checked the derivation of these and found that the determinant of the alleged metric tensor is zero on all the horizons in Kruskal. Not only that but the protagonists all seem to think that this is OK! It isn't. Kerr and Eddington-Finkelstein are their own maximal extensions. If time permits I will also show why "soft hair" is fool's gold and why the Kerr-Schild approximation method gives the Ligo curves in its first step.

**Presenter:** Prof. KERR, Roy Patrick (University of Canterbury, Christchurch, New Zealand and ICRANet, Italy)