



Origin of Space-Time

Scientific convenor

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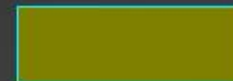
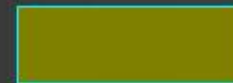
$Z = \text{infinity} !$

issues

- birth, evolution, death of the Universe
 - strong curvature and quantum regime
(big bang, big crunch singularity)
 - emergent 4-dimensional spacetime
(string theory, LQG, (D)brane worlds,
large extra dimensions)
 - anything else on $z=\infty$
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2006 – 2007

- (D)brane cosmology
- (non)critical string
- flux compactifications
- landscapes
- loop quantum cosmology
- modified gravity



Activity centered at

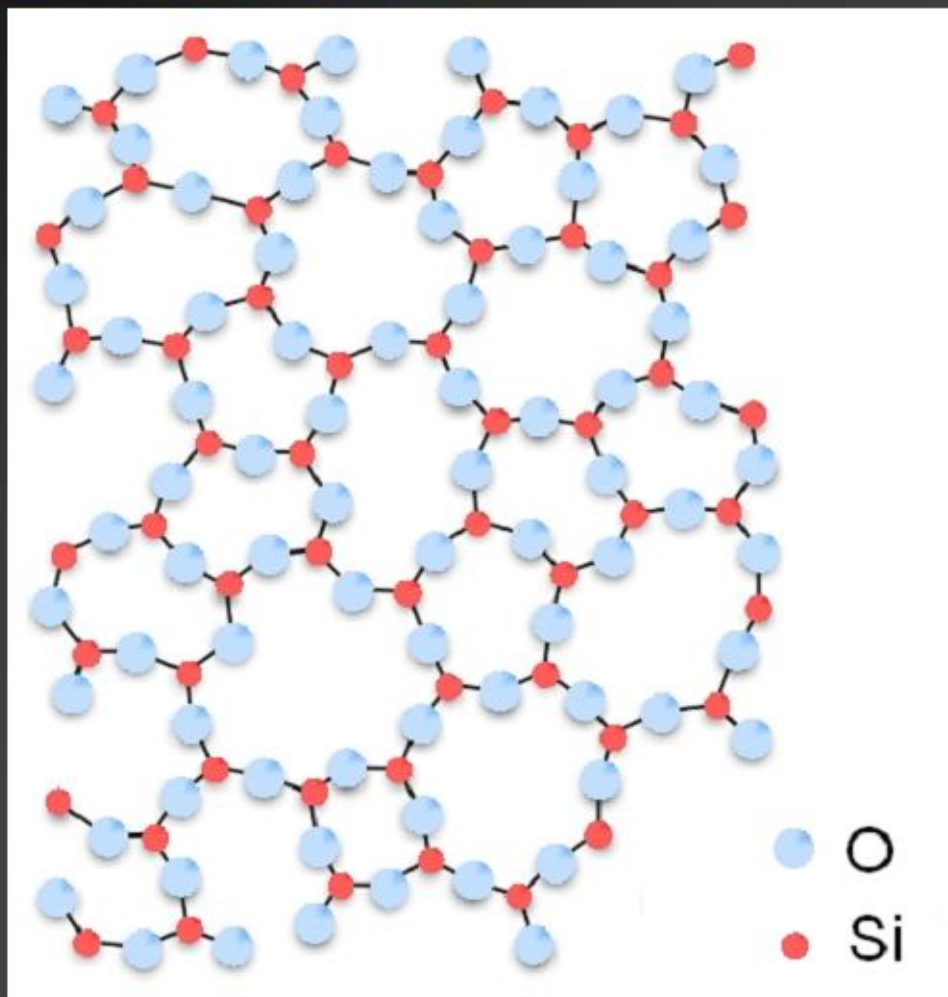
- Durham, Oxford, Athens, Ioannina
- Seoul, Helsinki, King's College
- Lancaster, Oxford, Helsinki
- King's College
- Durham, Copenhagen

Geographic diversity called for!

Reflections on Landscape

- wine (window) glass as the prototype





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- no need to be anthropic
 - Metastable vacua $\sim \exp(N_{\text{Avogadro}} \ln 2)$
 - relaxation time $\sim 10^{2-3}$ years

 - universal
 - scale dependent but not exponentially
 - not by anthropic, use *ab initio*.
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Shut up and Calculate!

anonymous
