String Theoretic Toy Models of the Big Bang JEREMY MICHEL-
SON, University of Kentucky — Recently, examples of toy cosmologies have been
found that are exact solutions of String Theory. These solutions have the feature
that the theoretical framework permits reliable calculation arbitrarily close to the
big bang singularity. Thus one can understand both the big bang, and late time
physics. I will describe these toy cosmologies, and how they fit into String Theory's
chains of equivalences between gravitational and nongravitational theories. These
equivalences are the means by which one theoretically probes the big bang.

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