



**Ronald E. Hatcher**  
**Science on Saturday Lecture Series**  
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**The Cosmic Multiverse: Science or Fantasy?**

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**ABSTRACT:**

I will describe the logic behind the so-called "multiverse," why some scientists take this idea seriously, and how astrophysical observations could confirm or falsify its existence. Along the way I will give a brief tour of modern cosmology, focusing especially on the big bang and the tiny fraction of a second immediately following it, and on the distant future and ultimate fate of our universe.

**BIOGRAPHY:**

Matthew Kleban is a theoretical physicist working on cosmology, elementary particle physics, and string theory. His research focuses on the quantum physics of black holes, the origin, large-scale structure, and ultimate fate of the universe, and the physics of the very early universe. He is a professor of physics and chair of the Physics Department at New York University.