

The Theory of Everything public lecture:

# THE BIG BANG COSMOLOGY AND INFLATION



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# SUMMARY

- ▶ **General Relativity** is a very elegant theory of gravity
- ▶ **Big Bang** is one of its predictions but there many others
- ▶ **Inflation** solves many problems of the Big Bang theory
- ▶ Inflation can be driven by either **scalar** or **vector** fields
- ▶ **Eternal inflation** might unify string theory and inflation

UPCOMING EXPERIMENTS WILL TEST ALL OF THESE IDEAS