

Innovation and Complex Life

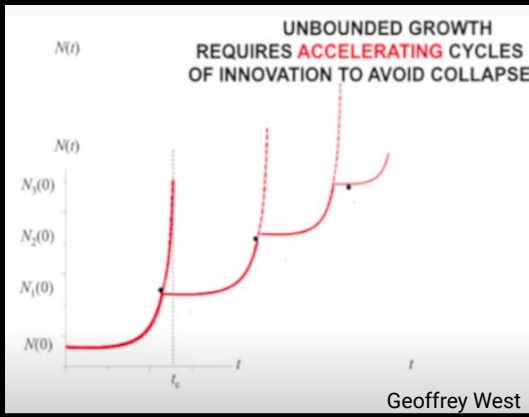
By: Searra Foote

EMERGENCE@ASU

In collaboration with: Sara Walker and Hyunju Kim

Introduction

- Quantifying the search for technosignatures
- Addressing time frames of relevant signals for technosignatures
- Studying the acceleration of innovation
- Role of innovation in complex life



Methods

- Gain interdisciplinary mindset by reading papers across disciplines to support own ideas
- Explore opposing ideas
- Discovering priors and parameters to build a model equation
- Focus on what innovation means

Questions

- What is the timeframe of relevant signals?
- Are all technosignatures detectable?
- What are ways to detect technosignatures that are not observation based?
- Is innovation related to complex life?
- How can the search be quantifiable and what equations can be used?

Conclusions

- Innovation cycles must be generated at a continually accelerating rate to sustain growth
- Have we passed the The Great Filter or not
- We need to consider Fermi's Paradox
- We are not the sole purpose of existence, nor a fluke
- Our search must continue, despite that clear signs of intelligent life are undiscovered in the universe