

\*\* CSSS June 2023 \*\*

\*\*\* Definitional mess

1. Nominal; Denotational; Real/propositional (aim at structure and logic: model and reality; theory like definitions)
2. D/R ontological without "hasty monism" - no need for theories of everything.

\*\*\* History of Complexity

Entropy; Evolution; Computation; Control (non-linear dynamics)

1. Prehistory
2. Papers

:connections:

1. Shannon an Algebra for theoretical genetics, 1940.
2. Turing - Butler Erewhon;
3. Holland Turing; Church; Wright
4. Wiener - Maxwell;

\*\*\* Nature of Complexity beyond Plato's lucid dream

1. Wigner
2. Wigner Reversal
3. Candidates:
  - Solaris
  - Tribbles

\*\*\* Structure of science - complexity and machine learning.

1. Math science quadrant: theory space
2. Path through theory space
3. paper to share if of interest:

\*\*\* CSSS Discussion Items

1. Definition, History and Domain (foreground and background - institutional challenges of this balance)
2. Role of mathematics and computation - analytical versus algorithmic.
3. Life and intelligence (intensive and extensive distinctions)
4. Integrative Systems and Plurality of Emergent conflicts (discipline here?)
5. Applications and Policy (EE, EPE, etc. )