

The origin of life (OoL) on earth is still in search of a satisfactory explanation. The field is dominated by many facets and partial explanations. Many other fields of the biosciences have benefitted from the introduction of formal models, that forced researchers to be explicit about assumptions made and allowed mathematical reasoning to be applied and computational experiments to be made. Such models have been introduced but research in them has not been very dominant so far. However, as OoL research gains pace, they will be given more attention. Examples of formal models related to OoL are Conway, von Neumann, Ganti, Kauffman and Steel. For formal models to be useful they should capture some essence of the empirical problem and as time passes they should be forced towards increasingly realistic descriptions of the phenomena.

This project will implement efficiently, that algorithms that has been published by Steel and co-authors (describing RAFs - **R**eflexive **A**utocatalytic **F**oodsets!) and a summer project completed in 2010. Hopefully, some extensions will also be pursued. Efficient implementation will have scientific gains in its own right. In the published papers many questions were untouched, because there didn't exist modules/programs to tabulate quantities of interest relating to RAFs and the papers had to focus only on the existence/non-existence of RAFs.