Accepted Manuscript

The origin and early evolution of life in chemical composition space

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PII: S0022-5193(18)30395-3

DOI: https://doi.org/10.1016/j.jtbi.2018.08.016

Reference: YJTBI 9581

To appear in: Journal of Theoretical Biology

Received date: 3 January 2018
Revised date: 3 August 2018
Accepted date: 10 August 2018



Please cite this article as: David A. Baum, The origin and early evolution of life in chemical composition space, *Journal of Theoretical Biology* (2018), doi: https://doi.org/10.1016/j.jtbi.2018.08.016

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Highlights:

- Life states maintain themselves out of equilibrium by rapidly creating their key components
- Chance changes in composition can move a life state to a new, life state that is further from the environmental equilibrium
- New life is most likely to originate at interfaces between low and high diffusion phases
- Adaptive evolution in surface-associated life explains complexification and the origin of cells

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