There is no satisfying explanation for how the earliest forms of cellular life first emerged on Earth at least 3.5 billion years ago. Although everyone recognizes the importance of the Origin of Life as a fundamental question in science, there may be a perception that it is too distant to investigate experimentally. However, our panel today will make the case that there are ways to tackle the problem in a concrete way in the laboratory. Understanding the Origin of Life boils down to solving two practical chemistry problems. How were the molecules required by life synthesized? How is a replicating molecular process initiated? The newly funded Origins of Life Laboratory at McMaster will test and challenge the hypothesis of how the first life on Earth has evolved and under which conditions Earth-like life on different planets or asteroids could have originated. We will have three short presentations from our panel members intended to encourage questions from the audience about how the origin of life could have occurred and how we can study it today.

A panel discussion by

David Deamer and Bruce Damer (University of California Santa Cruz) and Maikel Rheinstadter (McMaster University)