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# HOW CAN MATH PROMOTE LIFE?

**THURSDAY, MARCH 7, 2024**

**3:30-5:00PM (Doors open at 3:00) | ENC 70**

Plato and Aristotle stated different conceptions of the good: mathematical order vs. human flourishing. These come together to the extent that mathematics promotes life, that mathematical language enables collectives to make sense of the world and coordinate activity. Rules—including delineation, measurement, and constraint—are not static relations, but instead are dynamically enforced. Mathematics was invented by people—think Euclid, Leibniz,

Turing—to help account for, and hence make sense of, some aspect of the world. Importantly, it is still being invented to this day. In this talk, I'll explain how the mathematical field called category theory accounts for mathematical fields—systems of ruled structures—and how these fields relate. I'll briefly dive into a category called Poly, because it is particularly relevant as a Plato-Janus-Aristotle good: it is both magnificently structured and also highly relevant for

cultivating coordinated activity. Poly can be described as consisting of decision-spaces and abstractions between them. In particular, I'll briefly discuss dynamic organizations, such as prediction markets and machine learning, in the language of Poly. Finally, I'll reopen the title-question of how we can cultivate the formation of ruled accounting systems that help us make better sense of the world and hence promote life.

**Free & Open to the Public | Event is In-person and Online**

**Register at: [https://go.ucalgary.ca/2024\\_Math-Phil\\_Lecture\\_LPRegistration.html](https://go.ucalgary.ca/2024_Math-Phil_Lecture_LPRegistration.html)**



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