

ENRICHED CATEGORIES IN TOPOLOGY: AN APPROACH

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ABSTRACT. Lawvere's 1973 paper on *Metric spaces, generalized logic, and closed categories*, most known for his challenging proposal of looking at metric spaces as enriched categories, contains a variety of interesting categorical facets of topology. This talk tackles two different proposals present on Lawvere's work.

The first part of the talk will focus on well-established contributions of Lawvere's approach to metric spaces to the study of the categorical behaviour of various topological structures, while the second part will focus on recent results on quantale-normed categories, again a notion suggested by Lawvere in his 1973 paper.

This talk is essentially based on a long-standing joint work with Dirk Hofmann and Walter Tholen.