

BETWEENNESS IN ENRICHED CATEGORIES

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ABSTRACT. The idea that a point can be between two other points is ubiquitous throughout mathematics. Commonly this is modelled with a ternary relation. In this talk, we argue that betweenness is intrinsic to the theory of enriched categories. More precisely, every betweenness relation induces an enriched category, and every enriched category comes with a betweenness relation. It turns out that this shift in interpretation is functorial.