

The topic I am interested in, has its roots in the geometric theory of quasiconformal maps in R^n . At first I try to describe a general framework for this study which fits naturally to the study of metric spaces and uniformly continuous maps between such spaces. We have three basic entities here which we call categories:

- \mathcal{D} : the class of subdomains of R^n
- \mathcal{C} : the type of uniform continuity,
- \mathcal{M} : the class of metrics.

Let us now try to outline what these could include. The category \mathcal{D} could include e.g. uniform domains, domains with uniformly perfect boundaries, polygonal domains ($n = 2$) and quasiballs (images of the unit balls under quasiconformal mapping). The category \mathcal{C} could include Hölderian, Lipschitz, isometries, quasiisometries and identity mappings. The category \mathcal{M} of metrics M could include e.g. hyperbolic type metrics, (quasihyperbolic metric, the distance ratio metric), conformal invariants (the modulus metric and J. Lelong-Ferrand metric). The framework allows for a great many variations, by letting the domain, mapping and metric independently vary over the categories \mathcal{D} , \mathcal{C} and \mathcal{M} . This very general setup was suggested by M. Vuorinen, who supervised my thesis where I studied a few of these problems. I am interested to study model theory of metric structure, and get in touch with the French group of researchers who are developing it.