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*On topological spaces and fibrous preorders*

In this talk we will report on a project started in January 2012, which aims at finding an internal categorical structure (one that can be defined in an arbitrary category with finite limits) with at least the following two properties: if internal to the category of sets it gives topological spaces; if internal to the category of groups it gives topological groups. At the moment we were able to identify a new structure, called *fibrous preorder*, which is a generalization of a preorder. Using this new structure we were able to extend the well-known equivalence between finite topological spaces and finite preorders to an equivalence between arbitrary topological spaces and fibrous preorders.