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Abstracts of Short Communications and Posters

Section:

6. Topology

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Totality versus naturality
Partial and many-valued mappings are called *maps*. An ordinary (everywhere defined and single-valued) map is called *total*. A *selector* of a (natural) map $\Phi : X \to Y$ is a total (but as a rule non natural) map $\phi : X \to Y$ such that $\phi(a) \in \Phi(a)$ whenever $\Phi(a)$ is defined.
Claim. In algebraic topology total maps between cohomology groups (and their tensor products) are more convenient and more useful than non total. In other words contrary to the general opinion it is worth while to sacrifice naturality for the sake of totality.
Example. Expedient selectors of Massey products give $A(\infty)$-structure. This allows to use all algebraic machinery (operads, bar-constructions and so on).