

Partial equivalence relations, localizations, and equipments

Jonas Frey

May 24, 2023

This talk discusses how the exact completion $C[P]$ of a regular hyperdoctrine P can be represented as the homotopy category of a category of fibrant objects $C\langle P \rangle$. We give sufficient conditions for the existence of derived functors to functors $C\langle \Phi \rangle : C\langle P \rangle \rightarrow C\langle Q \rangle$ induced by finite meet preserving indexed monotone maps $\Phi : P \rightarrow Q$, and explain how the construction of derived functors fits into a framework of proarrow equipments.