Categorical Semantics of Linear Logic

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Abstract

This article is a survey of categorical semantics of intuitionistic linear logic and it's soundness. Firstly, historical background regarding the origin of linear logic is dealt with. Secondly, we give an intuitive account for each logical connectives in linear logic. Thirdly, we give a semantics of IMLL by symmetrical monoidal closed category. Lastly, giving categorical interpretation of exponential modality, we interpret IMELL by Lafont category.