Böhm Trees and the separability of λI - calculus

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Abstract

The Böhm trees are objects related to λ -terms, which are their generalizations of infinite normal forms and they arose from the works of Böhm (1968), Böhm's Theorem on the separability of λ -terms. Barendregt, in his book, gives to Böhm trees the important role in the analysis of the models \mathcal{P}_{ω} and \mathcal{D}_{∞} . An important consequence of Böhm's theorem, is that $\beta\eta$ -equivalence is the maximal non-trivial congruence on normalizable λ -terms which extends the β -equivalence.

References

 Barendregt, H. P. (1984) - The Lambda Calculus: Its Syntax and Semantics PhD Thesis, 2012 Studies in Logic 103, second, revised edition, North-Holland, Amsterdam