β-equivalence of linear planar λ-terms

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Abstract. The correspondence between linear λ-terms and trivalent rooted maps inherits some interesting properties from rooted maps to linear λ-terms. As an example, the genus is one of them. Using the genus of a λ-term to measure its complexity, the λ-term with genus zero (or planar terms) are the simplest. And for this kind of λ-terms there are easier procedures to decide β-equivalence.

References

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