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Strong reduction of combinatory calculus with streams. (English) Zbl 1326.03023

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Summary: This paper gives the strong reduction of the combinatory calculus SCL, which was introduced as a combinatory calculus corresponding to the untyped Lambda-mu calculus. It proves the confluence of the strong reduction. By the confluence, it also proves the conservativity of the extensional equality of SCL over the combinatory calculus CL, and the consistency of SCL.

MSC:

03B40 Combinatory logic and lambda calculus

Keywords:

combinatory logic; lambda-mu calculus; strong reduction; confluence

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