**Statman, Richard**

**Products in a category with only one object.** (English) [Zbl 07454914]

Based on [*R. Statman*, Lect. Notes Comput. Sci. 1258, 446–459 (1997; Zbl 0882.03063)], this paper considers certain decision problems for certain fragments of the free model of the theory of Cartesian monoids, introducing a model of computation grounded on the notion of a single stack one-way pushdown automaton beholden to [*S. Ginsburg* et al., J. Assoc. Comput. Mach. 14, 389–418 (1967; Zbl 0171.14803)]. The fragments considered include the submonoid of right invertible elements so that the results in this paper apply to the Thompson-Higman groups [*R. J. Thompson*, Stud. Logic Found. Math. Vol. 95, 401–441 (1980; Zbl 0431.20030); https://books.google.co.jp/books/about/Finitely_Presented_Infinite_Simple_Group.html?id=CUfttAEACAAJ&redir_esc=y]

For the entire collection see [Zbl 1466.68028].

Reviewer: Hirokazu Nishimura (Tsukuba)

**MSC:**

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|---|---|
| 18B40 | Groupoids, semigroupoids, semigroups, groups (viewed as categories) |
| 03G25 | Other algebras related to logic |
| 68Q45 | Formal languages and automata |

**Full Text:** Link

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