

# Errata for [BRW12]

April 29, 2015

1. On p. 25 (p. 6 in the version on the third author’s website), the paragraph starting with ‘The same solution’ and ending with ‘(see e.g. [SBBR10])’ should be changed into the following:

The same solution can also be obtained by providing an appropriate algebra for the monad  $T$  to  $S \times TX^A$ , which is equivalent to defining the extension from  $f$  to  $\bar{f}$  in the sense that there is a unique  $T$ -algebra morphism from the free algebra for the monad  $T$  to  $S \times TX^A$  with the structure thus provided, such that ... (*continue as in the paper*)

2. On p. 29 (p. 10 in the version on the third author’s website), in Proposition 8, the condition ‘Whenever  $\sum_{i \leq m} f_{i0}(\sum_{k < i} o(\sigma)^k \sigma^{i-k-1}) \neq 0$ ’ should be changed into ‘Whenever  $o(\sum_{i \leq m} f_{i0}(\sum_{k < i} o(\sigma)^k \sigma^{i-k-1})) \neq 0$ ’. In the seventh line of the proof, the same change should be applied once more.

This change (and weakening of the proposition) is necessary because in the ring of streams, the inverse  $\sigma^{-1}$  of a stream  $\sigma$  only exists if  $o(\sigma) \neq 0$ .

## References

- [BRW12] Marcello M. Bonsangue, Jan Rutten, and Joost Winter. Defining context-free power series coalgebraically. In Dirk Pattinson and Lutz Schröder, editors, *CMCS*, volume 7399 of *Lecture Notes in Computer Science*, pages 20–39. Springer, 2012.
- [SBBR10] Alexandra Silva, Filippo Bonchi, Marcello M. Bonsangue, and Jan Rutten. Generalizing the powerset construction, coalgebraically. In Kamal Lodaya and Meena Mahajan, editors, *FSTTCS*, volume 8 of *LIPICs*, pages 272–283. Schloss Dagstuhl—Leibniz-Zentrum für Informatik, 2010.