

The files (`iccp2020-cps-LSYNomega.hs` and `iccp2020-cps-LSYN.hs`) included in this directory contain Haskell ([www.haskell.org](http://www.haskell.org)) implementations of the denotational semantics presented in the IEEE ICCP 2020 submission entitled:

”Metric Semantics for Concurrent Languages Designed in Continuation-Passing Style”

File `iccp2020-cps-LSYNomega.hs` implements the denotational semantics of language  $\mathcal{L}_{SYN^\omega}$ . File `iccp2020-cps-LSYN.hs` implements the denotational semantics of language  $\mathcal{L}_{SYN}$ . The semantic interpreters can be tested using function `run` as in the following example:

```
Main> run t1
```

```
...
```

(`Main>` is the GHC prompt.)  $\mathcal{L}_{SYN^\omega}$  example programs  $t_1, t_2$  and  $t_3$  presented in the paper (Example 1) can be executed using function `main`.

```
Main> main
```

```
...
```

Various other  $\mathcal{L}_{SYN^\omega}$  example programs are also available, and can be executed using functions `main2` and `main3`.

Note that  $\mathcal{L}_{SYN}$  is a sublanguage of  $\mathcal{L}_{SYN^\omega}$  (because  $\mathcal{N} \subseteq J$ ; see Definition 11 and Section V-A). Due to space limitations, the paper presents no  $\mathcal{L}_{SYN}$  example programs. However, the file `iccp2020-cps-LSYN.hs` contains a couple of  $\mathcal{L}_{SYN}$  example programs, which can be tested using function `main`, as illustrated above.

Further explanations are provided as comments in the Haskell files `iccp2020-cps-LSYNomega.hs` and `iccp2020-cps-LSYN.hs`.