mpc Arbitrary Precision Complex Number Arithmetic

Murray Stokely

July 31, 2018

mpc is an R package that provides access to the mpc[1] library for the arithmetic of complex numbers with arbitrarily high precision and correct rounding of the result.

```
>    library(mpc)
>    mpc(3+3i, 52)

Rounding: MPC_RNDNN
[1] "(3.0000000000000000 3.0000000000000000)"
```

References

[1] Andreas Enge, Mickaël Gastineau, Philippe Théveny, and Paul Zimmermann. *mpc — A library for multiprecision complex arithmetic with exact rounding.* INRIA, 0.9 edition, 2011. `http://mpc.multiprecision.org/`.