

- ▶ VALERIA DE PAIVA and GISELLE REIS, *Benchmarking linear logic*.
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Benchmarking automated theorem proving (ATP) systems using standardised problem sets is a well-established method for measuring their performance, especially in the case of classical logical systems. However, the availability of such libraries for *non-classical* logics is very limited. For intuitionistic logic several small collections of formulas have been published and used for testing ATP systems and Raths, Otten and Kreitz [2] consolidated and extended these small sets to provide the ILTP Library <http://www.cs.uni-potsdam.de/ti/iltp/>. For quantified modal systems we have both Wisniewski, Steen and Benzmüller's as well as the Raths and Otten libraries of problems.

In this work we seek to provide a similar benchmark for Girard's Linear Logic [1] and some of its variants. For quick bootstrapping of the collection of problems we use Girard's translation of the collection of intuitionistic theorems discussed in the ILTP library. Eventually we hope to compare different Linear Logic provers over an augmented collection of problems.

[1] GIRARD, JEAN-YVES, *Linear logic*, *Theoretical computer science*, vol. 50, number 1, pages 1–101, (1987).

[2] RATHS, THOMAS AND JENS OTTEN AND CHRISTOPH KREITZ, *The ILTP problem library for intuitionistic logic*, *Journal of Automated Reasoning*, vol. 38, number 1–3, pages 261–271, (2007).