

- ▶ LEONARD KUPŚ AND ALEXANDER BOLOTOV, *Hypersequent calculus for PLTL*.
Adam Mickiewicz University in Poznań.
E-mail: leonard.kups@outlook.com.
University of Westminster.
E-mail: A.Bolotov@westminster.ac.uk.

Linear Time Logic (LTL) has been considered in a number of proof systems, ranging from tableaux methods, natural deduction and sequent calculi. The temporal reasoning present in sequent calculi and tableaux methods is similar and faces similar obstacles, thus it is possible to draw analogies between the two systems. However, it cannot be said about labelled natural deduction [1] and sequent calculi. To fill this gap, we offer a hypersequent calculus for PLTL based on reasoning from labelled natural deduction.

[1] BOLOTOV, A., GRIGORIEV, O. AND SHANGIN, V., *A Simpler formulation of natural deduction calculus for linear-time temporal logic*, **Proceedings of the 3rd Indian International Conference on Artificial Intelligence** (Pune, India), (P. Bhanu, editor), 2007, pp. 1253-1266.