1125-03-1667 **Katalin Bimbó*** (bimbo@ualberta.ca), 2–40 Assiniboia Hall, University of Alberta, Department of Philosophy, Edmonton, Alberta T6G2E7. *Multisets, a ternary relation and decidability.*

Multisets with finitely many elements (over a denumerable set) correspond to positive integers. Some logics such as the relevance logic R_+ or classical linear logic can be formulated as sequent calculi using multisets of formulas. The decidability of classical propositional linear logic (LL) was proved by J. M. Dunn and myself in 2015 (by expanding the decidability result for $MELL$, the multiplicative–exponential fragment of LL proved by me in *Theoret. Comput. Sci.* **597** (2015), pp. 1–18.).

In this talk, I give a different proof of the decidability of LL using Kopylov's normalization of LL together with the correspondence between multisets and positive integers. (Received September 18, 2016)