1117-17-187 **Maarten J. Bergvelt*** (bergv@illinois.edu). *N-Bosonization and Q-systems.*

In the usual bosonization of representations of affine Lie algebras one chooses a Heisenberg subalgebra. In this talk we will discuss a variant of the construction where one uses, instead of a Heisenberg algebra, the lower triangular subgroup N of the loopgroup. To the usual bosonization integrable systems are attached, given by infinite hierarchies of differential equations. In case of N bosonization one also gets integrable systems, but now they consist of difference equations. The simplest case of the loop group of $SL(2)$ on obtains the Q-system known from statistical mechanics and other parts of representation theory. (Received January 13, 2016)