1154-16-1174 **Richard M. Green*** (rmg@euclid.colorado.edu), Department of Mathematics, University of Colorado Boulder, Campus Box 395, Boulder, CO 80309-0395. *Generalized nil Temperley–Lieb algebras and particle configurations.*

A full heap is a certain type of infinite (but locally finite) partially ordered set whose elements are labeled by the vertices of a Dynkin diagram. Any full heap can be used to define a generalized nil Temperley–Lieb algebra, which in the special case of type affine A gives rise to the usual affine nil Temperley–Lieb algebra. I will describe the general construction of these algebras and show how, in certain cases, they arise as algebras of operators on particle configurations that come from statistical physics. (Received September 13, 2019)