1052-20-322 Lisa Carbone* (carbonel@math.rutgers.edu). The Haagerup property, Property (T) and the Baum-Connes conjecture for lattices in locally compact Kac-Moody groups.

We discuss the construction and properties of lattices in symmetrizable locally compact affine or hyperbolic Kac-Moody groups. For example there is a dichotomy between nonuniform lattices in symmetrizable Kac-Moody groups of noncompact hyperbolic type, with certain ones satisfying the Haagerup property and hence the Baum-Connes conjecture with coefficients, and others satisfying Kazhdan's Property (T) and the Baum-Connes conjecture without coefficients. Kac-Moody groups with the Haagerup property act properly on simplicial trees and certain examples also contain infinite descending chains of cocompact lattices. (Received August 31, 2009)