1018-17-129 **Crystal Hoyt*** (crystal@math.berkeley.edu), Department of Mathematics, University of California, Berkeley, CA 94720-3840, and **Vera Serganova**. *Regular Kac-Moody superalgebras.*

We study Lie superalgebras defined by a Cartan matrix, which satisfy the additional condition that the adjoint module is integrable over the even part. More than one Cartan matrix can define the same Lie superalgebra, but these are related by odd reflections of the algebra at a simple isotropic root. The integrability condition implies that each of these Cartan matrices must be a generalized Cartan matrix. A Kac-Moody superalgebra is called regular if after every odd reflection the resulting algebra is Kac-Moody. We recently classified all regular Kac-Moody superalgebras containing a simple isotropic root. We found that for symmetrizable Kac-Moody superalgebras, this is equivalent to finite growth. For the non-symmetrizable case, there are three families. Two of these have finite growth, $S(1,2,\alpha)$ and $q(n)^{(2)}$, while the third does not. We will discuss $S(1,2,\alpha)$, which is a deformation of $A(0,1)^{(1)}$. (Received March 02, 2006)