1135-57-178 **Jay J. Zimmerman*** (jzimmerman@towson.edu), **Angel V. Kumchev** and **Coy L. May**. *The Genus Spectrum of Abelian Groups.*

The set S of positive integers that may appear as the genus of a finite abelian group is called the genus spectrum of abelian groups. We will look at the genus spectrum of abelian groups for the strong symmetric genus S_σ and for the real genus S_ρ. We obtain a set of (simple) necessary and sufficient conditions for an integer g to belong to S_σ. We also prove that the set S_σ has an asymptotic density and that density is approximately .3284. The situation for the real genus is considerably more complicated. We obtain a set of necessary conditions for an integer g to belong to S_ρ. We also prove that the real genus of an abelian group is not congruent to 3 (modulo 4) and that the real genus of an abelian group of odd order is a multiple of 4. Finally, we obtain upper and lower bounds for the density of the set S_ρ. (Received August 07, 2017)