1154-05-464 **Ayomikun Adeniran*** (ayoijeng@math.tamu.edu), **S. Butler**, **C. Defant**, **Y. Gao**, **P. E. Harris**, **C. Hettle**, **Q. Liang**, **H. Nam** and **A. Volk**. *On the Genus of a quotient of a numerical semigroup.*

A numerical semigroup is a subset of $\mathbb{N}_0$ that is closed under addition, contains 0, and has finite complement in $\mathbb{N}_0$. There are several fundamental invariants of a numerical semigroup S among which are the *Frobenius number* and *genus* of S, denoted $F(S)$ and $g(S)$, respectively. The *quotient* of a numerical semigroup S by a positive integer d is the set $S/d = \{x \in \mathbb{N}_0 : dx \in S\}$ which is also a numerical semigroup. In this talk, we present a recent result showing the relation between the genus of S/d and the genus of S. Also, we will show certain identities relating the Frobenius numbers and the genus of quotients of numerical semigroups that are generated by certain types of arithmetic progressions. This is joint work with S. Butler, C. Defant, Y. Gao, P. E. Harris, C. Hettle, Q. Liang, H. Nam, and A. Volk. (Received September 04, 2019)