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Bernadette Boyle* (boyleb7@sacredheart.edu). *The Index of a Family of Complete Intersection Numerical Semigroup Rings*. Preliminary report.

In 2013, O. Veliche developed a closed formula to find the index of a complete intersection numerical semigroup ring with three generators. There are other ways to compute the index of these rings with more than three generators; however, these methods can be complicated and require one to find other values first, such as the Frobenius number and the order of elements. In this talk, we will compute the index of a family of complete intersection numerical semigroup rings, in particular those associated to the semigroup generated by $(2^n, 2^n + k, 2^n + 2k, 2^n + 2^2k, \dots, 2^n + 2^{n-1}k)$ where k is an odd integer. (Received September 25, 2017)