1131-17-418   **Ben L Cox*** (`coxbl@cofcedu`), Charleston, SC 29401. *On the module structure of the center of certain hyperelliptic Krichever-Novikov algebras.* Preliminary report.

Let $\mathfrak{g}$ denote a finite dimensional simple complex Lie algebra and R a commutative algebra over $\mathbb{C}$. It is well known the universal central extention of $\mathfrak{g} \otimes R$ has center Ω/dR, the space of Kähler differentials modulo exact forms. The automorphism group of R acts on this center and for a particular family of hyperelliptic curves R we describe how the center decomposes into a sum of irreducible representations. In this description certain families of recursively defined polynomials appear that arise from hyperelliptic integrals. This is joint work with Mee Seong Im. (Received July 18, 2017)