Darlayne Addabbo\* (addabbo@math.arizona.edu) and Katrina Barron (kbarron@nd.edu).

Higher level Zhu algebras for Vertex Operator Algebras. Preliminary report.

We will discuss the structure of the level  $n \geq 2$  Zhu algebras for the Heisenberg vertex operator algebra as well as techniques used in determining the structure of higher level Zhu algebras in general. We will give an example to clarify the necessity of certain conditions in defining higher level Zhu algebras, and discuss applications of these results. (Received September 15, 2020)