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Elaborating on the Unrolled Quantum Group of $\mathfrak{sl}(2)$. Preliminary report.

In this talk we will be expanding on the representation theory of the unrolled quantum group $\overline{U}_q^H(\mathfrak{sl}_2)$ when $q = e^{\frac{2\pi i}{p}}$, $p > 2$. We will discuss how $\overline{U}_q^H(\mathfrak{sl}_2)$ -mod forms a ribbon category, properties of the center of $\overline{U}_q^H(\mathfrak{sl}_2)$, how the simple and projective modules form a subcategory, the existence and properties of logarithmic modules, and results that have applications to topological quantum field theory (TQFT). (Received August 15, 2019)