1125-N1-702 **Eyob S Demeke*** (edemeke@calstatela.edu), 5151 State University Dr, Dept. of Mathematics, Los Angeles, CA 90032. *How proficient learners of mathematics read proofs: An exploratory study.*

Research document that students have difficulty understanding the very concept of proof, identifying the role logic and definitions play in mathematical argumentation, and validating and constructing non-trivial proofs (Harel & Sowder, 1998; Inglis & Alcock, 2012; Moore, 1994; Selden & Selden, 2003).

Some researchers such as Weber (2012) conjectured that students difficulty comprehending proofs in part due the fact they lack effective proof reading strategies. Building on the work of Weber (2015) on proof reading strategies, in this talk I will discuss eleven effective proof reading strategies that came out of my interview study with mathematics doctoral students. I argue that students can use these strategies to enhance their proof comprehensions. Finally, I will briefly discuss the implication this research can have on mathematics pedagogy as well as mathematics education research. (Received September 09, 2016)