1154-11-1760 **Andrew G Earnest** and **Lakshika Gunawardana*** (laksh.gg@siu.edu). *A Primitive Counterpart to the Fifteen Theorem.*

In 1993, J.H. Conway and W.A. Schneeberger presented the Fifteen Theorem, which provides simple criteria to determine whether a positive definite classically integral quadratic form in any number of variables is universal. Later in 2000, M. Bhargava provided a refinement of the Fifteen Theorem and showed that there are exactly 204 positive definite classically integral quaternary quadratic forms, up to equivalence, which are universal. We try to determine which of the forms in the 204 list are primitively universal, and try to determine whether there exists a finite set S of integers such that every positive definite integral quadratic form that primitively represents the integers in S, primitively represents all positive integers. In this talk, we introduce a conjecture which could be a primitive counterpart to the Fifteen Theorem.

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