

1154-11-141 **Freda Li*** (fli@wesleyan.edu), CT. *Strictly n -regular Hermitian lattices*. Preliminary report.

One of the main questions in the study of quadratic forms is the representation problem, which asks: given a quadratic form f , for which integers a does there exist a solution to $f(x) = a$? This has led to the study of different types of quadratic forms, which include regular and strictly regular quadratic forms. The representation problem, and notion of regularity have natural extensions to the study of Hermitian forms. I will discuss my thesis work on integral Hermitian forms which satisfy a higher dimensional analogue of the strict regularity condition for Hermitian forms. (Received August 14, 2019)