

1154-VS-1265      **Freda Li\*** (fli@wesleyan.edu). *Regularity Conditions on 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. I will discuss my work on how properties that hold for such quadratic forms have natural analogues in the study of Hermitian forms. (Received September 14, 2019)