

1106-VQ-1962 **F. Patane***, frankpatane@ufl.edu, and **A. Berkovich**. *Essentially Unique Representations by Certain Ternary Quadratic Forms.*

In this talk we generalize the idea of “essentially unique” representations by ternary quadratic forms. We employ the Siegel formula, along with the complete classification of imaginary quadratic fields of class number less than or equal to 8, to deduce the set of integers which are represented in essentially one way by a given form which is alone in its genus. We consider a variety of forms which illustrate how this method applies to any of the 794 ternary quadratic forms which are alone in their genus. As a consequence, we resolve some conjectures of Kaplansky regarding unique representation by the forms $x^2 + y^2 + 3z^2$, $x^2 + 3y^2 + 3z^2$, and $x^2 + 2y^2 + 3z^2$. (Received September 15, 2014)