Meeting: 998, Houston, Texas, SS 19A, Special Session on Algebraic Geometry

998-14-288 Isidro B. Nieto* (nieto@ifm.umich.mx), Ciudad Universitaria, edificio C-3 Morelia, Michoacan, Mexico. Ramified coverings of polarized abelian type (1,3)-surfaces. Preliminary report.

Fix (A, L) an abelian surface of type (1,3) with L a symmetric line bundle and

let $\varphi: A \to \mathbf{P}_2$ be the mapping given by

the linear system |L|. This is a covering of degree 6 ramified

along a branch curve B of degree 18. Recent work of Lange-Sernesi

shows that B is singular along 72 nodes and 36 cusps. The problem is

to determine the equations for B with a full level structure. We discuss several approaches to the solution to this problem

and an example. (Received March 01, 2004)