Turkish Journal of Mathematics

🔍 Keywords
🔍 Authors

@

Scientific Journals Home Page

Constructing New K3 Surfaces

Selma ALTINOK
Department of Mathematics,
Faculty of Art and Sciences,
Adnan Menderes University,
09010 Aydın-TURKEY
e-mail: saltinok43@yahoo.com

Abstract: This paper is concerned with a method based on birational geometry and produces dozens of new examples in codimensions 3, 4, 5 etc. The method is called unprojection by Reid. Using this method we construct new examples of K3 surfaces of codimensions 3 and 4 in weighted projective spaces from smaller codimension K3 surfaces whose rings are much simpler. This leads to the existence of almost all candidates for codimension 3 K3 surfaces in the list.