

1131-13-253

Tai Ha* (tha@tulane.edu), Tulane University, Department of Mathematics, 6823 St. Charles Avenue, New Orleans, LA 70118. *Depth and regularity modulo a principal ideal.*

We shall discuss the relationship between depth and regularity of a homogeneous ideal I and those of (I, f) and $(I : f)$, where f is either a linear form or a monomial. We shall also give a number of interesting consequences on depth and regularity of edge ideals of hypergraphs and of powers of homogeneous ideals. (Received July 17, 2017)