1026-14-217 **Gavril Farkas*** (gfarkas@math.utexas.edu), University of Texas at Austin, Austin, TX 78712, Austin, TX 78712. *Koszul cohomology and moduli of Prym varieties.*

Generic abelian varieties of dimension g are notoriously hard to describe geometrically. Those abelian varieties which are Jacobians of curves are much better understood. However, one gets a larger family of abelian varieties by considering Prym varieties corresponding to etale double covers between curves. We describe a geometric compactification of the moduli space R_g of Prym varieties of dimension $g-1$ and construct a syzygy stratification of this space using the Koszul cohomology of Prym canonically embedded curves. As an application we show that R_g is of general type for $g > 12$. (Received February 27, 2007)