

1172-13-250

**Jennifer Biermann\*** (biermann@hws.edu), **Hernán de Alba**, **Federico Galetto**, **Satoshi Murai**, **Uwe Nagel**, **Augustine O’Keefe**, **Tim Römer** and **Alexandra Seceleanu**. *Betti numbers of symmetric shifted ideals*.

We introduce a new class of monomial ideals which we call symmetric shifted ideals. Symmetric shifted ideals are fixed by the natural action of the symmetric group and, within the class of monomial ideals fixed by this action, they can be considered as an analogue of stable monomial ideals within the class of monomial ideals. We show that a symmetric shifted ideal has linear quotients and compute its (equivariant) graded Betti numbers. As an application of this result, we obtain several consequences for Betti numbers of symbolic powers of defining ideals of star configurations. (Received August 30, 2021)