

1069-11-80

Min Ho Lee*, Department of Mathematics, Cedar Falls, IA 50614. *Modular polynomials and quasimodular forms.*

Modular polynomials are polynomials whose coefficients are modular forms of certain type, and they are in one-to-one correspondence with quasimodular polynomials that are naturally associated to quasimodular forms. In addition to the formal derivative operator ∂_X , there is a differential operator \mathcal{D}_λ on quasimodular polynomials corresponding to the derivative operator on quasimodular forms. We discuss linear maps of quasimodular polynomials corresponding to certain linear maps of modular polynomials, which reduce to the operators \mathcal{D}_λ and ∂_X in special cases. (Received January 14, 2011)