1030-05-163

Sung Y. Song^{*} (sysong@iastate.edu), Department of Mathematics, Iowa State University, Ames, IA 50011. Symmetrizable three-class association schemes and Schur rings. Preliminary report.

We will describe the three-class nonsymmetric association schemes whose symmetrizations are the wreath product of two one-class association schemes. We will discuss the existence of such symmetrizable three-class fission for given imprimitive two-class association schemes and find examples of such symmetrizable fissions coming from various sources. We will see that many examples are nicely interpreted in terms of Schur rings among other objects. (This is a joint work with Michael Klin and Leif Jorgensen.) (Received July 31, 2007)