1023-M5-117 **Richard E. Klima*** (klimare@appstate.edu), Department of Mathematical Sciences, Appalachian State University, 342 Walker Hall, Boone, NC 28608, and **Neil P. Sigmon** (npsigmon@radford.edu), Department of Mathematics, Radford University, P.O. Box 6942, Radford, VA 24142. *Using Maplets and Java to Teach Reed-Solomon Codes.* Preliminary report.

It has been claimed that Reed-Solomon codes are the most frequently used error correcting codes in the world. They have a rich assortment of uses, including in the transmission of digital photographs through space, the encoding of music on compact discs, and the development of high-speed supercomputers. As such, Reed-Solomon codes form an important application of linear and abstract algebra, and are appropriate to be studied by students as a formal part of or an individual or group project in introductory courses in either of these subjects. In this presentation, the authors will show how they use Maplets and Java (with similar interface) to study Reed-Solomon codes with their students. (Received August 01, 2006)