1135-C1-2838   **Michelle L Ghrist*** (`ghrist@gonzaga.edu`), Department of Mathematics, 502 E. Boone Avenue MSC 2615, Spokane, WA 99258. *Exploring Subspaces and Bases through Magic Squares.*

Here, I present more details on a project in which students explore the concepts of subspaces and bases through the lens of magic squares, expanding on an idea first mentioned in my talk at the 2015 Joint Mathematics Meetings (which was originally inspired by a problem from Strang's book Linear Algebra and Its Applications). In addition, I also discuss how some these ideas generalize to larger magic squares. One key new question: Can one find a relationship between the dimension of the subspace and the size of the magic square? (Received September 26, 2017)