1145-20-2087 **Catherine Buell**, **Aloysius Helminck**, **Vicky Klima**, **Jennifer Schaefer**, **Carmen Wright*** (carmen.m.wright@jsums.edu) and **Ellen Ziliak**. *On the Structure of Generalized Symmetric Spaces of $SL_n(\mathbb{F}_q)$.*

Symmetric spaces were introduced by Élie Cartan as a special class of homogeneous Riemannian manifolds. Since then a rich and deep theory has been developed. This theory plays a key role in many fields of active research such as Lie theory, number theory, differential geometry, harmonic analysis and physics. The theory of symmetric spaces has numerous generalizations including reductive symmetric spaces, symmetric varieties, and symmetric k-varieties. In this talk, the structure of the generalized and extended symmetric spaces for $\mathrm{SL}_n(k)$ where k is a finite field of odd characteristic will be presented for the inner and outer involutions of $\mathrm{SL}_n(k)$. (Received September 24, 2018)