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19085. *Automorphism groups of classical affine association schemes of Latin type*. Preliminary
report.

We consider the family of **complete classical affine association schemes** \mathcal{A}_p of order p^2 and rank $p + 2$ where p is an odd prime. Each such scheme is known to be amorphic, meaning that every possible merging of its $p + 1$ classes results in a fusion scheme. We refer to such fusion schemes as **classical affine schemes**.

Let \mathcal{M} be a classical affine scheme of order p^2 . Then the automorphism group $\text{Aut}(\mathcal{M})$ contains $\text{Aut}(\mathcal{A}_p) \rtimes K$ where K is the stabilizer of \mathcal{M} in $\text{PGL}(2, p)$. We are especially interested in the case when $\text{Aut}(\mathcal{M}) = \text{Aut}(\mathcal{A}_p) \rtimes K$. We call such schemes **standard**.

In our investigations we make strong use of a bijection between all classical affine schemes \mathcal{M} and all ordered partitions π of the point set of the projective line $\text{PG}(1, p)$. We write $\mathcal{M} = \mathcal{M}(\pi)$.

Special attention is paid to schemes of so-called **Latin type**, i.e., schemes $\mathcal{M}(\pi)$ in which every cell of π has size at least 3. Based on exhaustive computer data for $p \leq 11$ and partial data for $p = 13$, we make the following:

Conjecture: *Every scheme of Latin type is standard.* (Received July 06, 2018)