In this note we describe cluster automorphisms for the finite cluster algebras $A_2, A_3, A_4, D_4, A_5, D_5, E_6$. We then describe ways of defining non-classical weight-4 cluster polylogarithms which respect these automorphisms.

$\underline{A_2}$ $\simeq \mathrm{Gr}(2,5)$ clusters: 5 a-coordinates: 5 x-coordinates: 10

$\mathcal{X}$-coordinate seed: $x_1 \to x_2$

$\mathcal{A}$-coordinate seed, with frozen coordinates, in both $\mathrm{Gr}(2,5)$ as well as generic coordinates:

$$
\begin{tikzcd}
\boxed{\langle 12\rangle} \arrow[dr] & & & \\
& \langle 13\rangle \arrow[r] \arrow[d] & \langle 14\rangle \arrow[r] \arrow[d] & \boxed{\langle 15\rangle} \\
& \boxed{\langle 23\rangle} & \boxed{\langle 34\rangle} \arrow[ul] & \boxed{\langle 45\rangle} \arrow[ul]
\end{tikzcd}
\quad \Leftrightarrow \quad
\begin{tikzcd}
\boxed{f_1} \arrow[dr] & & & \\
& a_1 \arrow[r] \arrow[d] & a_2 \arrow[r] \arrow[d] & \boxed{f_5} \\
& \boxed{f_2} & \boxed{f_3} \arrow[ul] & \boxed{f_4} \arrow[ul]
\end{tikzcd}
\tag{1}
$$

$\Rightarrow x_1 = \frac{f_1 f_3}{f_2 a_2}, x_2 = \frac{a_1 f_4}{f_3 f_5}$