orbit on $\mathbb{P}^1$. The number of points in the $K(g, \alpha)$-orbit corresponding to Q is easily seen to be the number of pre-images in Q of any point of $\pi_\alpha(Q) \subseteq G/P_\alpha$. The conclusion regarding the degree of $\pi_\alpha|_Y$ follows. $\square$

In [Bri01], the graph for the weak order on K-orbit closures is endowed with additional data, as follows: If $Y' = s_\alpha \cdot Y \neq Y$, then the directed edge originating at Y and terminating at Y' is labelled by the simple root α, or perhaps by an index i if $\alpha = \alpha_i$ for some predetermined ordering of the simple roots. Additionally, if the degree of $\pi_\alpha|_Y$ is 2, then this edge is double. (In other cases, the edge is simple.) We modify this convention as follows: Rather than use simple and double edges, in our diagrams we distinguish the degree two covers by blue edges, as opposed to the usual black. (We do this simply because our weak order graphs were created using GraphViz, which does not, as far as the author can ascertain, have a mechanism for creating a reasonable-looking double edge. On the other hand, coloring the edges is straightforward.)

1.5 Symbolic parametrization of orbits

In each individual case we consider, a symbolic parametrization of the orbit set, as well as a combinatorial description of the weak ordering in terms of this parametrization, is given. This allows us to determine formulas for the classes of all orbit closures, starting with the closed orbits at the bottom of the ordering, and moving up by applying divided difference operators.

The details of individual cases are given in the corresponding sections, but here we give some general information and definitions which will be relevant when discussing each of the various cases.