- This is the output of the experiment discussed where the 1918 different essential graphs with 4 vertices are sorted into classes by an invariant consisting of the colored partial order equipped with the BF-invariant of each irreducible component along with the BF-invariant of the whole system, and then elementary equivalences are sought within each class. We illustrate only those classes where two or more elements are not found to be flow equivalent this way, and only one represenative of each subclass known to be move equivalent.

- Legend:

Cases that are obviously flow equivalent but not found by the program by its inability to deal with uneven partitions of vertices efficiently.
Cases that are obviously flow equivalent (having same BF-invariant and being irreducible) but where there is no flow equivalence passing through graphs with only 4 vertices.
Cases that may be seen to be not move equivalent by the BF-group of the system corresponding to a subgraph.
Cases that may be seen to be not move equivalent by a more advanced appeal to the Boyle-Huang work.