

# The fundamental symmetry of homogeneous binary differential equations

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This special class of binary differential equations has the property that the symmetry group is always non-trivial. The existence of a fundamental symmetry in the group allows us to know when the two foliations have distinct shapes or not. Moreover, we can see that the invariant straight lines that can occur on the configurations have different behavior depending on the parity of the degree of the coefficients. Co-author: M. Manoel.