1067-14-819   **Christine Berkesch*** (`cberkesc@math.su.se`), Department of Mathematics, Stockholm University, SE-106 91 Stockholm, Sweden, and **Laura Felicia Matusevich**. *Equivariant methods for hypergeometric systems.*

The solutions of classical Horn systems of differential equations, including the Gauss and Appell–Lauricella hypergeometric equations, are among the most studied functions in mathematics. After applying a change of variables that gives an isomorphism of solution spaces, Horn systems are transformed into torus-equivariant systems, and the combinatorial tools of toric geometry have provided descriptions of important D-module theoretic properties of these new systems. While this change of variables does not induce an isomorphism at the level of differential equations, we establish a quotient relationship between Horn systems and their equivariant counterparts that opens the door for passage of these D-module theoretic properties to the classical setting. (Received September 15, 2010)

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