The monodromy representation of Lauricella's hypergeometric function F_C

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Abstract. We study the monodromy representation of the system E_C of differential equations satisfied by Lauricella's hypergeometric function F_C of *m* variables. Our representation space is the twisted homology group associated with an integral representation of F_C . We find generators of the fundamental group of the complement of the singular locus of E_C , and we give relations for these generators. We express the circuit transformations along these generators, using the intersection forms defined on the twisted homology group and its dual.

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