

Input: ODE

ODE Matrix  $K$

$H$  is row HNF of  $K$  and  $U$  is the corresponding Hermite Transform

$r$  is the number of zero rows in  $H$ ,  $A$  is the last  $r$  rows of  $U$

$V$  is the normal column HNF transform of  $A$  and  $W$  is inverse of  $V$

$V_n$  is the last  $n-r$  columns of  $V$  and  $W_d$  is the  $n-r$  last rows of  $W$

$(y_1, y_2, \dots, y_{n-r})$  are the new parameters

Proposition 6.2 From Hubert and Labahn Equation (24)

Output: Reparameterized ODE

