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Aldicio Jose Miranda* (aldicio@unifal-mg.edu.br), 700, Gabriel Monteiro da Silva street, Alfenas, Minas Gera 37130-000, Brazil, and **Marcelo Jose Saia** (mjsaia@icmc.usp.br), 400, Trabalhador Sao Carlense Avenue, Sao Carlos, Sao Paulo 13560-970, Brazil. *The presentation matrix associated to discriminant of co-rank one maps from \mathbb{C}^n to \mathbb{C}^n .*

Given a finite corank 1 map germ f in $\mathcal{O}_{n,n}$, the objective of this work is the construction of a presentation matrix of the ring of the critical locus as an \mathcal{O}_n -module via f^* . To this end, we use a general algorithm of Mond and Pellikaan and apply it directly to our case. The application of this algorithm in general is not an easy task and it is a challenge to find the presentation matrix, even in simple cases. However, for the maps considered here we present a fast implementation of the algorithm of Mond and Pellikaan, moreover we implement this construction using the software Maple, showing explicitly how to compute the elements of the presentation matrix for such maps. Then we show how to apply this construction to obtain invariants via Fitting ideals associated to the isolated stable singularities of such germs, called 0-stable singularities. (Received April 29, 2013)