USING KAPUR-SUN-WANG ALGORITHM FOR THE GRÖBNER COVER

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ABSTRACT. Kapur-Sun-Wang have recently developed a very efficient algorithm for computing Comprehensive Gröbner Systems that has moreover the required essential properties for being used as first step of the Gröbner Cover algorithm. We have implemented and adapted it inside the Singular grobcov library for computing the Gröbner Cover and there are evidences that it makes the canonical algorithm much more effective. In this note we discuss the performance of GC with KSW on a collection of examples.

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