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Ralph N McKenzie* (rn.mckenzie@vanderbilt.edu), Mathematics Department, 1326 Stevenson Center, Vanderbilt University, Nashville, TN 37240, and **Petar Markovic** and **Matthew Nickodemus**. *Algebra applied to the study of constraint satisfaction problems produces spectacular results both in universal algebra and on the side of computational complexity: a survey of recent work.*

The constraint satisfaction dichotomy conjecture of Feder and Vardi has been equivalently reformulated as a conjecture about the algorithmic problems $\text{CSP}(\mathbf{A})$ associated with finite idempotent algebras \mathbf{A} . It is now known that each of two very weak assumptions about \mathbf{A} implies that $\text{CSP}(\mathbf{A})$ is polynomial time solvable. These results combined appear to subsume all known tractable instances of the CSP. These results and related ones will be examined and discussed in the talk. (Received January 26, 2009)