

For a finite relational structure A , the Constraint Satisfaction Problem with template A , or $\text{CSP}(A)$, is the problem of deciding whether an input relational structure X admits a homomorphism to A . The CSP dichotomy conjecture of Feder and Vardi states that for any A , $\text{CSP}(A)$ is either in P or NP-complete. In the first part we present the algebraic approach to CSP and summarize known results about CSP for digraphs, also known as the H-coloring problem. In the second part we study a class of oriented trees called special polyads. Using the algebraic approach we confirm the dichotomy conjecture for special polyads. We provide a finer description of the tractable cases and give a construction of a special polyad T such that $\text{CSP}(T)$ is tractable, but T does not have width 1 and admits no near-unanimity polymorphisms.