1031-68-138   **Robert W McGrail*** (`mcgrail@bard.edu`), P.O. box 5000, Bard College, Annandale-on-Hudson, NY 12504, and **Mona Merling**. *Toward a Dichotomy Theorem for Finite Quandles.* Preliminary report.

In their seminal 1993 paper, Feder and Vardi demonstrated a strong correspondence between constraint satisfaction problems and finite algebras. Since that time many classes of finite algebras, including the varieties of groups and boolean algebras, have been shown to correspond to constraint satisfaction problems solvable in polynomial time. There has been a recent surge of interest in classes of finite algebras that exhibit a dichotomy theorem in which each algebra of the class is known to be tractable or NP-complete. The authors consider the variety of finite quandles as a likely candidate for such a dichotomy result and describe some of the challenges they have faced so far. (Received August 07, 2007)