962-20-1298   **Ben Ford*** (`ben.ford@sonoma.edu`), Department of Mathematics, Sonoma State University, Rohnert Park, CA 94928. *The Case for the Modular Frobenius Symbol.* Preliminary report.

Partitions are used as indexing sets for many structures in representation theory. For a given partition λ of a natural number n, there are several choices of notation to use to represent λ: a list of the elements of λ, the Frobenius symbol, or the abacus notation, for instance. Each has advantages and disadvantages in terms of understanding the combinatorics involved. In the course of trying to understand the Mullineux algorithm in the modular representation theory of finite symmetric groups, a new notation, the modular Frobenius symbol, was introduced. We will present the case for this symbol, giving simple proofs of some significant older results, and some new results, whose proofs use this method of representing partitions. (Received October 03, 2000)