

# Turkish Journal of Mathematics

Turkish Journal

of

Mathematics

Modular Symmetry Classes of Tensors

M. SHAHRYARI, M. A. SHAHABI

Department of Mathematics,

University of Tabriz, Tabriz-IRAN

 [Keywords](#)  
 [Authors](#)

**Abstract:** We introduce the notion of modular symmetry classes of tensors and give a necessary and sufficient condition for a modular symmetry class of tensors associated with the full symmetric group to be non-zero. Then we use modular symmetry classes of tensors to study the polynomial representations of  $GL(V)$ , where  $V$  is a vector space over a field of characteristic  $p$ . At the end we introduce a non-degenerate bilinear form on a modular symmetry class. Some problems are also given.

---

Turk. J. Math., **23**, (1999), 417-434.

Full text: [pdf](#)

Other articles published in the same issue: [Turk. J. Math., vol.23, iss.3.](#)



[math@tubitak.gov.tr](mailto:math@tubitak.gov.tr)

[Scientific Journals Home  
Page](#)