

# STRUCTURE AND REPRESENTATIONS OF DIFFERENTIAL OPERATORS ON THE TORUS

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We discuss a noncommutative version of Noether's Problem to the ring of differential operators on the torus, in the case the finite group is the symmetric group or a Weyl group of the families B and D. We also discuss some facts about simple weight modules of the invariants of the differential operator ring under the action of such groups.

*Joint work with Vyacheslav Futorny, (USP, Brasil).*