

Manuscrit reçu le 4 février 2014 et accepté le 6 mai 2014

# Orthosymplectic supersymmetries of modules of differential operators

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**Abstract** Let  $\mathfrak{F}_\lambda$  be the space of tensor densities of degree  $\lambda$  on the supercircle  $S^{1|1}$ . We consider the space  $\mathfrak{D}_{\lambda,\mu}^k$  of  $k$ -th order linear differential operators from  $\mathfrak{F}_\lambda$  to  $\mathfrak{F}_\mu$  as  $\mathfrak{osp}(1|2)$ -module and we determine the superalgebra  $\mathfrak{I}_{\lambda,\mu}^k$  of linear maps on  $\mathfrak{D}_{\lambda,\mu}^k$  commuting with the  $\mathfrak{osp}(1|2)$ -action.

2000 Mathematics Subject Classification: 53D55.

**Keywords:** orthosymplectic algebra, differential operators, densities.