

HOMFLY POLYNOMIAL  
INVARIANTS OF TORUS KNOTS  
AND BOSONIC  $(q, p)$ -CALCULUS

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S u m m a r y

For the one-parameter Alexander (Jones) skein relation we introduce the Alexander (Jones) “bosonic”  $q$ -numbers, and for the two-parameter HOMFLY skein relation we propose the HOMFLY “bosonic”  $(q, p)$ -numbers (“bosonic” numbers connected with deformed bosonic oscillators). With the help of these deformed “bosonic” numbers, the corresponding skein relations can be reproduced. Analyzing the introduced “bosonic” numbers, we point out two ways of obtaining the two-parameter HOMFLY skein relation (“bosonic”  $(q, p)$ -numbers) from the one-parameter Alexander and Jones skein relations (from the corresponding “bosonic”  $q$ -numbers). These two ways of obtaining the HOMFLY skein relation are equivalent.