## Khalifa TRIMECHE

**Harmonic analysis associated
with the Cherednik operators and the Heckman-Opdam theory**

**Abstract**. By using the trigonometric Dunkl intertwining operators and their duels introduced by the author, we define and study the hypergeometric translation operators associated with the Cherednik operators $T_1, ..., T_d$ and the Heckman-Opdam theory. Next with the help of these translation operators we define and study the hypergeometric convolution product of functions and distributions associated with the operators $T_1, ..., T_d$ and the Heckman-Opdam theory.