

# Preface

This note is based on series of lectures presented by Prof. Eric M. Opdam in one of the workshops of the Research Project “Harmonic analysis on homogeneous spaces and representation of Lie groups” at RIMS Kyoto University in 1997.

The first part is an exposition of Dunkl operators in the trigonometric, differential setting including the theory of hypergeometric functions and the harmonic analysis for the operators.

The second part gives two new interesting results related to fake degrees for a complex reflection group and *topological* cyclotomic Hecke algebra constructed by the monodromy representation of certain system of differential operators.

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