Grzegorz Łysik
Jan Kochanowski University in Kielce, POLAND
Email: glysik@ujk.edu.pl

Smoothness of the Dunkl analytic functions

For the reflection group W associated with a finite root system and a W-invariant weight function ω_κ Dunkl introduced in [1] a differential-difference operators T_j, $j = 1, \dots .n$, and the Dunkl Laplacian $\Delta_\kappa = \sum_{j=1}^n T_j^2$. A continuous function on a W-invariant set Ω is called *Dunkl analytic* if its mean value function over balls in Ω of radius R with respect to the measure $\omega_\kappa(x)dx$ is convergent for small $R > 0$. During the talk we shall show that Dunkl analytic functions are smooth.

References

[1] C. F. Dunkl, *Differential-difference operators associated to reflection groups*, Trans. Amer. Math. Soc. **311** (1989), 167–183.