Dunkl operators, special functions and harmonic analysis

Paderborn University

August 8-12, 2016

Schedule (as of August 8)

Monday, August 8

8:30 – 9:30	**Registration** (room O1.224)	
9:30 – 9:50	**Opening** (Lecture room O1)	
9:50 – 10:40	Yuan Xu *Analysis on the unit sphere with Dunkl weight functions*	
10:40 – 11:10	Coffee/Tea	
11:10 –12:00	Yuri Berest *Double affine Hecke algebras, character varieties of knots and the Jones polynomial*	
12:00 – 12:50	Monica Vazirani *A Schur-Weyl-like construction of $L(k^N)$ for the DAHA*	
12:50 – 14:20	Lunch	
14.20 – 15:10	Rupert Lasser *Character Spaces of Commutative Hypergroups*	
15:10 – 16:00	Erik Koelink *Matrix-valued orthogonal polynomials associated to quantum algebras*	
16:00 – 16:30	Coffee	
	O1.258	O2
16:30 – 17:00	Adam Nowak *On harmonic analysis operators* *in the Laguerre setting*	Maarten van Pruijssen *Vector-valued orthogonal polynomials* *in several variables*
17:00 – 17:30	Luz Roncal *Hardy-type inequalities for fractional* *powers of the Dunkl-Hermite operator*	Kathy Driver *Inequalities for extreme zeros* *of classical orthogonal polynomials*
17:30 – 18:00	Tomasz Szarek *Harmonic analysis operators in a* *certain Dunkl setting*	Stefan Kahler *Characterizations and harmonic analysis* *of sieved orthogonal polynomials*
18:00 – 18:30	Radouan Daher *Characterization of $(\eta, \gamma, k, 2)$-Dini-Lipschitz* *functions in terms of their Helgason Fourier* *transform*	Anbhu Swaminathan *Orthogonal polynomials on the real line* *corresponding to a perturbed chain sequence*

Tuesday, August 9

9:00 – 9:50	Iain Gordon *Galois theory aspects of Calogero-Moser space as limits of Dunkl operators*	
9:50 – 10:40	Simon Ruijsenaars *A relativistic conical function and its offspring*	
10:40 – 11:10	Coffee/Tea	
11:10 –12:00	Stephen Griffeth *Unitary representations of Cherednik algebras*	
12:00 – 12:50	Misha Feigin *On PBW subalgebras of rational Cherednik algebras*	
12:50 – 14:20	Lunch	
14.20 – 15:10	Léonard Gallardo *Some properties of Dunkl-subharmonic functions*	
15:10 – 16:00	Bechir Amri *Some facts about Dunkl's kernel of type A*	
16:00 – 16:30	Coffee	
	O1.258	O2
16:30 – 17:00	Chaabane Rejeb *Riesz type Potential Theory associated to root systems*	Nils Byrial Andersen *Generalized Dunkl Primitives, real Paley-Wiener theorems and Roe's theorem for the Dunkl transform on the real line*
17:00 – 17:30	Tomasz Luks *On the Green function and Hardy-Stein identities for the Dunkl Laplacian*	Salem Ben Saïd *A Paley-Wiener theorem about the spectral parameter and applications*
17:30 – 18:00	Michael Voit *On positive integral representations for Bessel functions* *(replaces talk by Hassine Kods)*	Sanjoy Pusti *Wiener Tauberian theorem for rank one semisimple Lie groups and for the hypergeometric transform*

Wednesday, August 10

9:00 – 9:50	Sundaram Thangavelu *Mixed norm estimates for the Cesaro means associated with Dunkl-Hermite expansions*
9:50 – 10:40	Bent Ørsted *Two-parameter deformations of the Hermite semigroup and Dunkl operators*
10:40 – 11:10	Coffee/Tea
11:10 – 12:00	Charles F. Dunkl *Hypergeometry, the Torus, and Representations of the Symmetric Groups*
12:00 – 12:50	Vincent Genest *The $\mathbb{Z}_2^n$ Dirac-Dunkl operator and a higher rank Bannai-Ito algebra*
12:50 – 14:15	Lunch
14:15	Excursion to Schloß Corvey

Thursday, August 11

9:00 – 9:50	Siddhartha Sahi *Macdonald's conjectures for hypergeometric functions*	
9:50 – 10:40	Hiroshi Oda *Differential-difference operators as glues between representation theories*	
10:40 – 11:10	Coffee/Tea	
11:10 –12:00	Jean-Philippe Anker *Random walks on affine buildings*	
12:00 – 12:50	Sergio Andraus *Relaxation dynamics in scaled Dunkl processes*	
12:50 – 14:20	Lunch	
14.20 – 15:10	Joachim Hilgert *Resonances and resonant states for (locally) symmetric spaces*	
15:10 – 16:00	Ruiming Zhang *Zeros of Ramanujan type entire functions*	
16:00 – 16:30	Coffee	
16:30 – 17:00	Mourad Ismail *Combinatorial and analytic properties of the n-dimensional Hermite polynomials*	
	O1.258	O2
17:00 – 17:30	Roy Oste *The symmetry algebra of the Dirac-Dunkl operator of type A_{N-1}*	Nobukazu Shimeno *Matrix-valued commuting differential operators and their joint eigenfunctions*
17:30 – 18:00	Wouter van de Vijver *A model for the higher rank Racah algebra*	Patrice Sawyer *An analogue to the Duistermaat- Kolk-Varadarajan estimate for the spherical functions associated with root systems of type A*
18:00 – 18:30	Tom Koornwinder *Addition type formulas associated with dual product formulas*	Mostafa Maslouhi *On the Dunkl intertwining operator*

Friday, August 12

9:00 – 9:50	Peter Forrester
	Dunkl theory in the study of random matrices
9:50 – 10:40	Jasper Stokman
	Rank dependence of qKZ equations and dense loop models
10:40 – 11:10	Coffee/Tea
11:10 –12:00	Luc Vinet
	The q-oscillator algebra and the Askey-Wilson polynomials
12:00 – 12:50	Dennis Stanton
	Finite fields and (q,t)-combinatorics
12:50	Closing and Lunch