Acta Mathematica Academiae Paedagogicae Nyíregyháziensis
32 (2016), 201–202
www.emis.de/journals
ISSN 1786-0091

CONFERENCE ON DYADIC ANALYSIS AND RELATED FIELDS WITH APPLICATIONS, JUNE 1-6, 2014, NYÍREGYHÁZA, HUNGARY

SÁNDOR FRIDLI AND KÁROLY NAGY

Preface

Conference on Dyadic Analysis and Related Fields with Applications (in short DARFA14) took place on June 1-6, 2014 at the campus of College of Nyíregyháza, Hungary. The organizers of the conference dedicated the event to three outstanding researchers in dyadic analysis on the occasion of their birthdays. Namely, to the 75th birthday of Ferenc Schipp (Eötvös Loránd University, Budapest, Hungary), to the 70th birthday of William Wade (La Biola University, Los Angeles) and to the 65th birthday of Péter Simon (Eötvös Loránd University, Budapest, Hungary). These birthdays were celebrated by the international community of the research field of dyadic analysis at this conference.

The members of Organizing and Scientific Committee were Ushangi Goginava (Tbilisi State University, Georgia), Radomir Stankovic (University of Niš, Serbia), István Blahota (College of Nyíregyháza, Hungary), Károly Nagy (College of Nyíregyháza, Hungary), Rodolfo Toledo (College of Nyíregyháza, Hungary), György Gát (College of Nyíregyháza, Hungary), Sándor Fridli (Eötvös Loránd University, Hungary), Ferenc Weisz (Eötvös Loránd University, Hungary) and Alexandros Soumelidis (MTA SZTAKI, Hungary).

The scientific programme started on Monday morning, June 2, and ended on Thursday evening June 5. The conference talks of the fifty participants coming from seven countries were held every day from morning until early evening. The talks generated very bright professional debates, discussions. The conference program included 4 one hour and 23 half-hour lectures presented by about 40 participants. In addition to that there was also a Poster Session. The participants came from the following countries: United States, Bosnia and Herzegovina, Georgia, Hungary, Russia, Armenia and Serbia. The conference was organized only for invited participants.

The main topic of the conference was the study of approximation based on locally constant orthonormal systems and the application of the results in different areas such as digital signal processing and optimization. The latest results in dyadic analysis and related topics have been discussed.

The conference was supported by the project, 'International dyadic analysis, research, and related issues; solutions in the digital world', with code number: TÁMOP 4.2.2.A.-11/1/KONV-2012-0051.

Program

Monday, June 1, 2014.

1. Ferenc Weisz, Convergence of trigonometric and Walsh-Fourier series
2. Margit Pap, Discretization of the voice transforms of the Blaschke group

3. Ilona Simon, Maximal convergence space of the $(C;\alpha)$ means of two-dimensional integrable functions on the 2-adic additive group (with György Gát)
4. Tímea Eisner, Discrete orthogonality of the analytic wavelets in the Hardy space of the upper half plane (with Margit Pap)
5. Balázs Király, Discrete orthogonal and biorthogonal product systems

Tuesday, June 3, 2014.

1. Radomir S. Stanković, Remarks on methods to compute dyadic derivatives on finite groups
2. Antal Járai, Quantum computers and Fourier transform
3. Sándor Fridli, Hörmander-Mihlin multipliers in Hardy space
4. Alexander Aplakov, On absolute convergence of the series of Fourier coefficients with respect to Haar-like systems
5. Levente Lócsi, Dyadic Blaschke products and reciprocal Blaschke functions
6. Zoltán Gilián, ECG-based heart beat detection using rational functions
7. Kristóf Szarvas, Variable Lebesgue spaces and continuous wavelet transforms

Wednesday, June 4, 2014.

1. Ushangi Goginava, On the strong summability of Walsh-Fourier series
2. George Tephnadze, On the Fejér means of Walsh-Fourier series
3. Valentin Skvortsov, On various types of continuity of multiple dyadic integrals
4. Ferenc Móricz, Statistical limit of Lebesgue measurable functions at ∞ with applications in Fourier analysis and summability
5. Grigori Karagulyan, On the divergence sets of some sequences of operators
6. Szilárd Révész, Extremal problems for positive definite functions on groups
7. Yuri Farkov, Discrete wavelets in Walsh analysis
8. Nacima Memić, Integrability of the maximal function of Fejér kernel

Thursday, June 5, 2014.

1. Alexandros Soumelidis, Signals and systems theory and identification using rational orthogonal bases and special wavelet constructions (with József Bokorand Zoltán Szabó)
2. Péter Kovács, Compressing biomedical signals by using rational functions
3. Maria Skopina, Walsh and wavelet methods for differential equations on the Cantor group (with Elena A. Lebedeva)
4. Igor Polyakov, (C;1)-summability and divergence of rearranged Walsh-Fourier series
5. Elena A. Lebedeva, Uncertainty principle for the dyadic group (with Aleksander V. Krivoshein)
6. Givi Nadibaidze, On the summability by Riesz method of series with respect to block-orthonormal systems
7. Zoltán Horváth, Construction of positively invariant sets for initial value problems using Fourier series

Poster section, Tuesday, June 3, 2014.

1. István Blahota, Some properties of kernels with respect to Vilenkin-like systems
2. György Gát, Summation methods of Walsh-Fourier series, almost everywhere convergence and divergence
3. Károly Nagy, Restricted two-dimensional Walsh-Fejér means and generalizations