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Nota di contenuto	""Contents""; ""Preface""; ""Combined List of Speakers and Titles of Their Talks""; ""Composite Wavelet Transforms: Applications and Perspectives""; ""1. Introduction.""; ""2. Composite wavelet transforms for dilated kernels.""; ""3. Wavelet transforms associated to one-parametric semigroups and inversion of potentials.""; ""4. Wavelet transforms with the generalized translation operator.""; ""5. Beta-semigroups.""; ""6. Parabolic wavelet transforms.""; ""7. Some applications to inversion of the k-plane Radon transform.""; ""8. Higher-rank composite wavelet transforms and open problems."" ""References""""Complex Sigma-Delta Quantization Algorithms for Finite Frames""; ""Decomposition and Admissibility for the Quasiregular Representation for Generalized Oscillator Groups""; ""Fourier Series on Fractals: A Parallel with Wavelet Theory""; ""1. Introduction""; ""1.1. Complex systems""; ""2. Multiresolution wavelets and Iterated Function Systems""; ""2.1. The attractor""; ""2.2. Multiresolutions""; ""2.3. The scaling equation, the invariance equation""; ""2.4. Orthogonality of the translates of the scaling function; orthogonality of the exponentials""

""2.5. The quadrature mirror filter condition and Hadamard triples""  
2.6. Lawton's theorem and transfer operators""; ""2.7. Cohen's  
orthogonality condition and the Laba-Wang theorem""; ""2.8. Super-  
wavelets and the completion of  $L^2$ ""; ""3. Open problems""; ""4.  
Appendix, with some of Jorgensen's recollections of conversations with  
Irving Segal, Marshall Stone, Bent Fuglede, and David Shale.""  
""References""; ""A Computational Complexity Paradigm for  
Tomography""; ""Invariant Differential Operators on Matrix Motion  
Groups and Applications to the Matrix Radon Transform""  
""Helgason's Support Theorem and Spherical Radon Transforms""

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