

Monday 07 September 2026

09:00–09:30	Opening Ceremony, C21 Lecture Hall 1					
09:30–10:30	Jeff Hogan: Clifford translates, wavelets, prolates, splines and bandpass bases Room: C21 Lecture Hall 1					
10:30–11:00	Coffee Break. Location: C21					
11:00–12:30	AI approaches to geometry Room: C21 Lecture Hall 2		Generalizations of complex analysis: Clifford, hypercomplex analysis and beyond Room: C03 Lecture Hall 4		Function theories in Cayley-Dickson algebras Room: C03 Lecture Hall 3	
11:00–11:30	Pierre-Philippe Dechant	From Clifford spinors and ADE correspondences to characteristic multivector invariants and machine learning	Uwe Kähler	Reproducing Kernel Krein modules in Clifford analysis	Graziano Gentili	Slice regularity, conformality and Riemann manifolds on quaternions and octonions
11:30–12:00	Ekaterina Filimoshina	Orthogonal equivariant neural networks via generalized Clifford groups	Fabrizio Colombo	Fine structures on the S -spectrum	Chiara de Fabritiis	Decomposition of slice-regular functions
12:00–12:30	Tomás S. R. Silva	Neural and numerical methods for G_2 -structures on contact Calabi-Yau 7-manifolds	Lashi Bandara	Geometric singularities and Hodge theory	Giulio Binosi	Dunkl approach to slice regular functions on real alternative $\ast$ -algebras
12:30–14:00	Lunch Break. Location: C04-Mensa					
14:00–15:30	Clifford algebra and the fundamental forces of nature (CAFFN) Room: C03 Lecture Hall 3		Differential invariants and geometric complexes Room: C21 Lecture Hall 2		Harmonic analysis Room: C03 Lecture Hall 4	
14:00–14:30	Nichol Furey	Standard model symmetries and the Unsuig algebra $\mathbb{O} \oplus \mathbb{H} \oplus \mathbb{C} \oplus \mathbb{R}$	Andrey Krutov	Quantum Clifford analysis	A. Debernardi Pinos	Fourier inequalities in Morrey and Campanato spaces
14:30–15:00	Nikolay Ketsaris	Electroweak internal symmetry, color and generation $\mathbb{Z}_3$ structures in the real Clifford algebra $\mathcal{Cl}(3, 1)$	Roman Lávička	Separation of variables in non-stable range	Federico Riccardi	The positivity of the Wigner distribution on LCA groups
15:00–15:30	Anthony N. Lasenby	A spacetime algebra approach to the symmetry groups of particle physics	Vladimír Souček	On the kernel of the k -Cauchy-Fueter operator	Zouhair Mouayn	Poisson integral transforms associated with the Landau problem on the hyperbolic disk
15:30–16:00	Coffee Break. Location: C21					
16:00–17:00	Kirill Krasnov: Exceptional geometry, Spin groups, and the standard model Room: C21 Lecture Hall 1					

Tuesday 08 September 2026

09:00–10:00	Jan Bruinier: Special values of modular functions and some applications C21 Lecture Hall 1					
10:00–10:30	Coffee Break. Location: C21					
10:30–12:00	Generalizations of complex analysis: Clifford, hypercomplex analysis and beyond Room: C03 Lecture Hall 4		Clifford algebra and the fundamental forces of nature (CAFFN) Room: C03 Lecture Hall 3		Differential invariants and geometric complexes Room: C21 Lecture Hall 2	
10:30–11:00	Danail Brezov	The Dirac operator in projective geometric algebra	Gene E. McClellan	Massive electrons, massless neutrinos: Electroweak gauge fields and a Higgs mechanism from a single Dirac-like equation in $\mathcal{G}_{4,1}$	Lukáš Krump	Complexes for the Dirac operator in several even-dimensional variables
11:00–11:30	Baruch Schneider	Reduced quaternionic Cauchy-like integrals	Tejinder P. Singh	Octonions, and an $E_8 \times E_8$ theory of unification	Svatopluk Krýsl	Twistor complexes in symplectic spin geometry
11:30–12:00	Neşet Deniz Turgay	Generalized Mandelbrot and Julia sets in arbitrary dimensions via a modified Clifford product	Martin Roelfs	Spinor representations from real geometric invariants of spin groups	Ümit Ertem	Modified Dirac operators and transformations between harmonic and twistor spinors
12:00–13:30	Lunch Break. Location: C04-Mensa					
13:30–15:00	Generalizations of complex analysis: Clifford, hypercomplex analysis and beyond Room: C03 Lecture Hall 4		Function theories in Cayley-Dickson algebras Room: C03 Lecture Hall 3		Differential invariants and geometric complexes Room: C21 Lecture Hall 2	
13:30–14:00	M. Elena Luna-Elizarrarás	Some properties of biquaternions seen as a bicomplex module	Irene Sabadini	Generalized partial-slice monogenic functions in the octonionic case	Simão Lucas	The S -spectrum and S -resolvent estimates for spin Dirac operators on manifolds with boundary
14:00–14:30	Yifan Zhang	Intrinsic q -radial vector derivatives and localized Fischer decompositions on radial algebras	Heikki Orelma	An $\mathfrak{sl}_2$ -Fischer decomposition for ultrahyperbolic operators with applications to complex octonion analysis	Lucas Almeida	Weitzenböck remainder spectrum on rational homogeneous varieties
14:30–15:00	Judith Vanegas	Parabolic Dirac operators and their fundamental solutions in parametric Clifford algebras	Youssef El Haoui	Split-octonions, zero divisors, and applications to cryptography	Dmitry Shirokov	On grade automorphism and Lie groups in ternary and generalized Clifford algebras
15:00–15:30	Coffee Break. Location: C21					

15:30–17:30	Harmonic analysis Room: C03 Lecture Hall 4		Function theories in Cayley-Dickson algebras Room: C03 Lecture Hall 3		Fractional integro-differential operators in two and higher dimensions Room: C21 Lecture Hall 2	
15:30–16:00	Marianna Chatzakou	Zero modes and Dirac-(logarithmic) Sobolev-type inequalities	Cinzia Bisi	Slice regular functions on alternative $\ast$ -algebras: Prescribing zeros and values on discrete sets and related extension problems	Arran Fernandez	Fractional polyanalyticity and applications
16:00–16:30	Alberto Richtsfeld	Boundary value problems for Dirac operators on graphs	Antonio Carbone	Reconstruction of a slice regular function from some of its real components	Nelson Faustino	Space-fractional Dirac equations: Where Strichartz estimates meet gauge transforms
16:30–17:00	Ren Hu	Octonion phase retrieval: Intrinsic symmetry, sign-orbit geometry, and native Kaczmarz reconstruction	Jasna Prezelj	Quaternionic and octonionic Cartan coverings and applications	Milton Ferreira	Factorization of the time-fractional telegraph equation and solutions
17:00–17:30	Paula Cerejeiras	Harmonic analysis over generalised q -Fock spaces			Antonio Di Teodoro	Anisotropic fractional harmonicity

Wednesday 09 September 2026

09:30–10:30	Christian Bär: From curvature to Dirac eigenvalues and back Room: C21 Lecture Hall 1
10:30–11:00	Coffee Break. Location: C21
11:00–12:00	Clifford prize lecture Kamal Diki: From complex to hypercomplex Fock spaces C21 Lecture Hall 1

Thursday 10 September 2026

09:00–10:00	Kit Ian Kou: The geometric analytic signal: Unifying harmonic conjugates, Clifford algebras, and robust denoising in 8D spaces Room: C21 Lecture Hall 1					
10:00–10:30	Coffee Break. Location: C21					
10:30–12:00	Function theories in Cayley-Dickson algebras Room: C03 Lecture Hall 3		Generalizations of complex analysis: Clifford, hypercomplex analysis and beyond Room: C03 Lecture Hall 4		Geometric algebra for modern signal processing: Foundations and frontiers Room: C21 Lecture Hall 2	
10:30–11:00	Riccardo Ghiloni	Unified hypercomplex function theory and Fueter-Sce phenomenon I	Wei Wang	The Hartogs-Bochner extension for monogenic functions of several vector variables and the Dirac complex	Wolf-Dieter Richter	Algebraic vector structures of arbitrary finite dimensions
11:00–11:30	Caterina Stoppato	Unified hypercomplex function theory and Fueter-Sce phenomenon II	Haipan Shi	Classifying slice-regular polynomials via group actions on the twistor space	Oliver Conradt	Poncelet’s theorem with projective algebra
11:30–12:00	Giulia Sarfatti	Quaternionic Carleson measures	Helmuth R. Malonek	On recent applications of discrete Clifford analysis in quantum mechanics	Johanka Brdečková	Representation of faulted signals in three phase power system using conformal geometric algebra
12:00–13:30	Lunch Break. Location: C04-Mensa					
13:30–15:00	Function theories in Cayley-Dickson algebras Room: C03 Lecture Hall 3		Generalizations of complex analysis: Clifford, hypercomplex analysis and beyond Room: C03 Lecture Hall 4		Clifford algebra and the fundamental forces of nature (CAFFN) Room: C21 Lecture Hall 2	
13:30–14:00	Alessandro Perotti	Fueter trees for Dunkl-regular functions over alternative *-algebras	Antonino De Martino	On the harmonic generalized Cauchy-Kovalevskaya extension and its connection with the Fueter-Sce theorem	Pedro Amao	An algebraic solution of the non-Hermitian Liouville-von Neumann equation for two-state systems in Clifford algebra
14:00–14:30	Enrico Savi	On the first-order theory of octonions	João Marques da Costa	Resolvent equations on the fine structures	Colin Hayhurst	Møller scattering from relational closure in Cl(1, 3)
14:30–15:00	Fabio Vlacchi	Recent developments in the theory of algebraic sets for slice-regular quaternionic polynomials	Francesco Mantovani	Fractional powers of bisectorial operators and applications to the nonlocal Fourier’s law	Angelo Hartmann	Sketching gauge theories of Clifford type
15:00–15:30	Coffee Break. Location: C21					

15:30–17:00	Function theories in Cayley-Dickson algebras Room: C03 Lecture Hall 3		Generalizations of complex analysis: Clifford, hypercomplex analysis and beyond Room: C03 Lecture Hall 4		AI approaches to geometry Room: C21 Lecture Hall 2	
15:30–16:00	Amadeo Altavilla	Models and semi-models for slice regular functions on real division algebras	Qinghai Huo	Octonionic Riesz-Dunford functional calculus	Ramon González Calvet	Norm and isometries in Clifford algebra
16:00–16:30	Davide Cordella	A multipoint Schwarz-Pick lemma for slice regular functions over the quaternions	Stefano Pinton	A variation of the Fueter theorem and the generalized polyanalytic Cauchy-Kovalevskaya extension of order 2	Julian Suk	Clifford algebra and surrogates for science and engineering
16:30–17:00	Vladimir Tkachev	Quasi-polar algebras and quasi-Clifford systems	Pablo Enrique Moreira-Galván	Solutions to time-harmonic Maxwell equations via transmutation theory		

Friday 11 September 2026

09:00–10:00	Nelson Vieira: Fractional Clifford analysis and hypercomplex operator calculus Room: C21 Lecture Hall 1					
10:00–10:30	Coffee Break. Location: C21					
10:30–12:00	Harmonic analysis Room: C21 Lecture Hall 2		Generalizations of complex analysis: Clifford, hypercomplex analysis and beyond Room: C03 Lecture Hall 4		Clifford algebra and the fundamental forces of nature (CAFFN) Room: C03 Lecture Hall 3	
10:30–11:00	Hicham Banouh	Logarithmic uncertainty principle for Clifford wavelet transform	Swanhild Bernstein	Q-Clifford analysis in quantum space	Eckhard Hitzer	Para-complex numbers and para-quaternions
11:00–11:30	Jens Wirth	Calculus on Spin groups and beyond	Martha Zimmermann	q -analytic functions and q -Fueter variables	Jens Köpflinger	Operational quantum reconstruction, Feynman rules, composition algebras, and beyond
11:30–12:00	Kamal Diki	Weyl operators and complex Itô-Hermite polynomials: From the classical to the q -setting	Narciso Gomes	Very weak solutions for quaternionic Dirac operators with Hermitian distributional coefficients	Václav Zatloukal	Spinor approach to guiding center approximation
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13:30–15:00			AI approaches to geometry Room: C21 Lecture Hall 2		Clifford algebra and the fundamental forces of nature (CAFFN) Room: C03 Lecture Hall 3	
13:30–14:00			Tancredi Schettini-Gherardini	GNNs for brane tilings	Thierry Socroun	Set of Clifford algebras and a Hydrogen atom solution with an improved Dirac equation
14:00–14:30			Truong Minh Huy	Versor: A geometric sequence architecture enhanced scale generalization and interpretability via conformal algebra	Sofia Rumyantseva	On the Dirac-Hestenes equation in higher dimensions and its properties
14:30–15:00			Hongbo Li	Null geometric algebra: An ideal tool for AI-aided geometric reasoning	Nikolay Marchuk	The biquaternionic Lanczos equation (1929) as a non-standard point of view on the Dirac equation
15:00–15:30	Coffee Break. Location: C21					
15:30–16:00	Closing ceremony Room: C21 Lecture Hall 1					