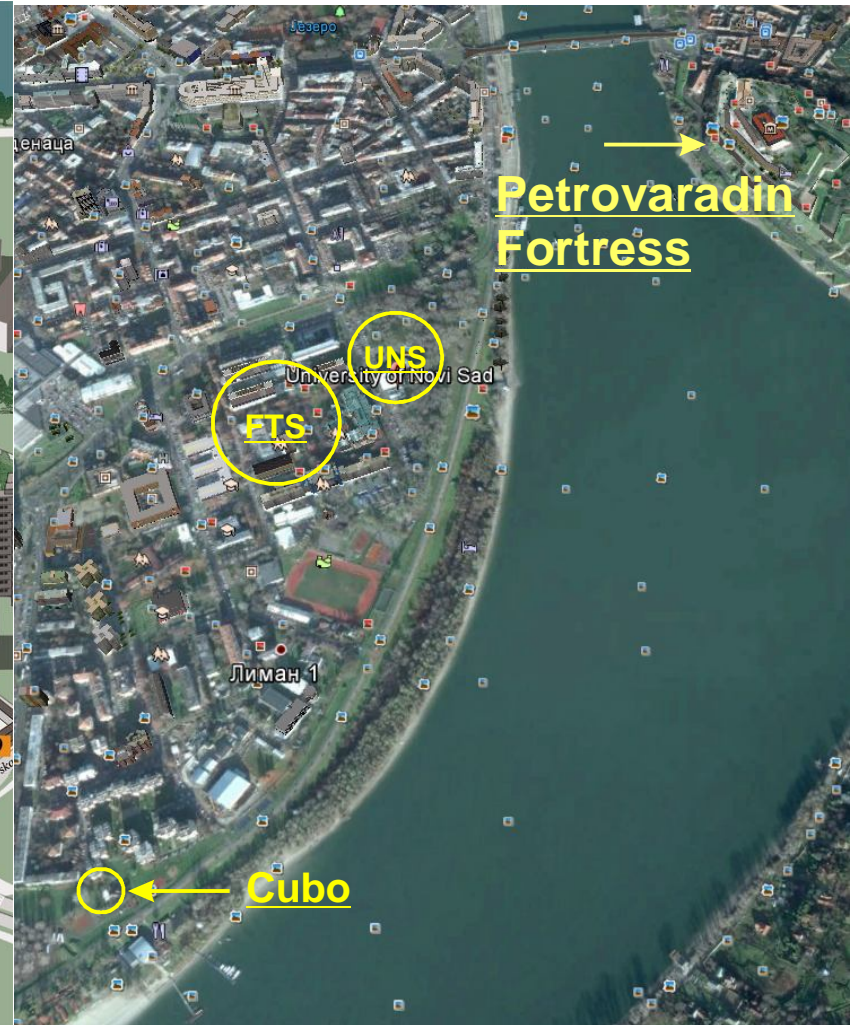
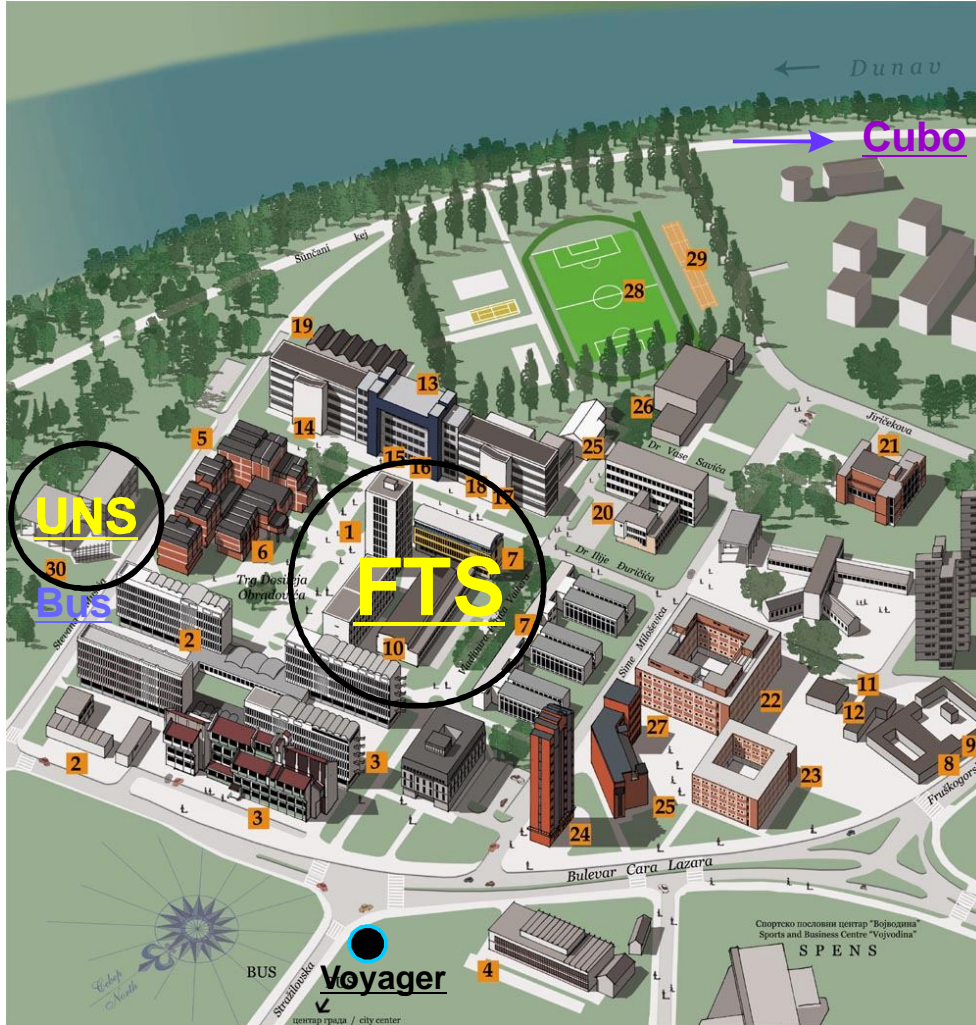


The timeline and locations of ICFDA16 events



Welcoming Cocktail will take place in UNS building on Sunday 17.07. at 19.00 hours

Monday 18.07.2016

8:00-9:00 [UNS] Registration of participants

9:00-9:30 [UNS] Performance of Gabriel Fauré - Fantasia Op.79
by Ivana Jurca (flute) and Ivana Muncan (piano),
followed by welcoming address of
Prof. Dusan Nikolic, Rector of UNS,
Prof. Rade Doroslovacki, Dean of FTS,
Prof. Stevan Pilipovic, SASA Branch of Novi Sad,
Prof. Vladimir Katic, IEEE Branch of Serbia and Montenegro,
Prof. Teodor Atanackovic, ICFDA16 IPC Chair

9:30-11:00 [UNS] Chair Francesco Mainardi, Plenary lectures:

Alain Oustaloup: From diversity to unexpected dynamic performances through non-integer differentiation, and
Teodor Atanackovic: Viscoelasticity containing real and complex order fractional derivatives

11:00-11:30 [UNS] Coffee break

11:30-13:30 [FTS] Parallel sessions:

Time\Amphitheater	A1	A2	A3	A4
Chairs	P. Melchior and R. Caponetto	R.R. Nigmatulin and V.V. Uchaikin	F. Liu and Ch. Li	J.A.T. Machado and HG. Sun
11:30-11:50	C13	G30	N11	A11
11:50-12.10	C21	G13	N14	A12
12:10-12.30	C45	G16	N17	A13
12:30-12:50	C11	G11	M17	B17
12:50-13.10	C39	G12	M23	B13
13:10-13.30	C37	G18	M24	B14

The map of FTS amphitheatres and the list of contributions are given at the end of this programme.

Monday 18.07.2016

13:30-15:00 [UNS] Lunch

15:00-16:30 [FTS,A1] Chair YangQuan Chen, Plenary lectures:

Dimitru Baleanu: New trends in fractional calculus and its applications, and
Vasily E. Tarasov: Fractional differential calculus: An open problem

16:30-17:00 [FTS, hall] Coffee break

17:00-19:00 [FTS] Parallel sessions:

Time\Amphitheater Chairs	A1	A2	A3	A4
	G. Maione and R. Malti	L. Plociniczak and D. Zorica	A.K. Lazopoulos and T. B. Sekara	V. Duarte and E. Sousa
17:00-17:20	C23	G17	E21	A14
17:20-17:40	C14	G15	E22	A17
17:40-18.00	C41	G28	E31	A18
18:00-18.20	C49	G24	E29	A16
18:20-18:40	C51	G19	C57	M22
18:40-19.00	C59		C27	M27

19:30-22:30 [Cubo] Wine tasting (http://www.vinarijabjelica.rs/#!//?page_id=8)
{To reach CUBO one has to walk 15 minutes from UNS along the riverbank}

Tuesday 19.07.2016

8:00-9:00 [FTS, hall] Posters exhibition

9:00-9:30 [FTS, A2] Parallel round table talks on displayed posters

9:30-11:00 [FTS,A1] Chair Teodor M. Atanackovic, Plenary lectures:

Francesco Mainardi: Complete monotonicity for fractional relaxation processes, and
Kai Diethelm: Properties of the solutions to "fractionalized" ODE systems with applications to processes arising
in the life sciences

11:00-11:30 [FTS, hall] Coffee break

11:30-13:30 [FTS] Parallel sessions:

Time\Amphitheater	A1	A2	A3	A4
Chairs	B. Jakovljevic and P. Lanusse	J. Paneva-Konovska and M. Klimek	R. Garrappa and X. Zhao	J.Z. Povstenko and T. Rangelov
11:30-11:50	C17	M31	S11	E11
11:50-12.10	C71	M15	S13	E12
12:10-12.30	C31	M25	S14	E26
12:30-12:50	C25	M13	S15	E18
12:50-13.10	C33	M14	S16	E16
13:10-13.30	C47	M16	C65	E34

13:30-15:00 [UNS] Lunch

Tuesday 19.07.2016

15:00-16:30 [FTS,A1] Chair Dumitru Baleanu, Plenary lectures:

Riccardo Caponetto: Nano structured material as fractional order element, and
Virgina Kiryakova: Oberchkoff integral transform and its relation to generalized fractional calculus

16:30-17:00 [FTS, hall] Coffee break

17:00-18:00 [FTS] Parallel sessions:

Time\Amphitheater	A1	A2	A3	A4
Chairs	M. Lazarevic	P. Ostalczyk	M. Zigic	C. Ionescu
17:00-17:20	C29	M33	G14	B11
17:20-17:40	C55	M35	G21	B12
17:40-18.00	C67	M37	G25	

18:15-19:00 [FTS, A1] A round table discussion:

FC: Where do we come from? What are we? Where are we going?,
Organizers: JAT Machado, F. Mainardi, V. Kiryakova, T. M. Atanackovic

**19:30-22:30 [Club Reset, Sremska Kamenica, <http://www.clubreset.org/>] Gala Dinner &
ICFDA16 Awards Ceremony**

{To reach Reset one has to be in front of UNS building at 19:30 and
use the ICFDA16 buses, that will
drive back to UNS Campus after the dinner}

Wednesday 20.07.2016

8:30-9:30 [FTS, A2] Steering Committee meeting

9:30-11:00 [FTS,A1] Chair Virginia Kiryakova, Plenary lectures:

Wen Chen, Yingjie Liang: Structural derivatives, implicit calculus equation, differential operator on fractal, and their applications, and

Clara M. Ionescu: The evolution of fractional order respiratory impedance models and their impact on lung function device development

11:00-11:30 [FTS, hall] Coffee break

11:30-13:30 [FTS] Parallel sessions:

Time\Amphitheater	A1	A2	A3	A4
Chairs	M. Rapaic and C.I. Muresan	D. Avci and C. Yeroglu	M.D. Ortigueira and I. Bazhlekov	A. Cernea and K.A. Lazopoulos
11:30-11:50	C69	E14	N21	G26
11:50-12.10	C61	E15	N22	G34
12:10-12.30	C15	E17	N23	M12
12:30-12:50	C19	E23	N12	M18
12:50-13.10	C35	E25	N18	M11
13:10-13.30	C43	E33	N19	M21

13:30-15:00 [UNS] Lunch

Wednesday 20.07.2016

15:00-15:45 [FTS,A1] Chair Igor Podlubny, Plenary lecture:

Reyad El-Khazali: Applications of El-Khazali operators in fractional-order control and fractional order digital filters

16:00-16.45 [FTS, A1] A plenary panel discussion:

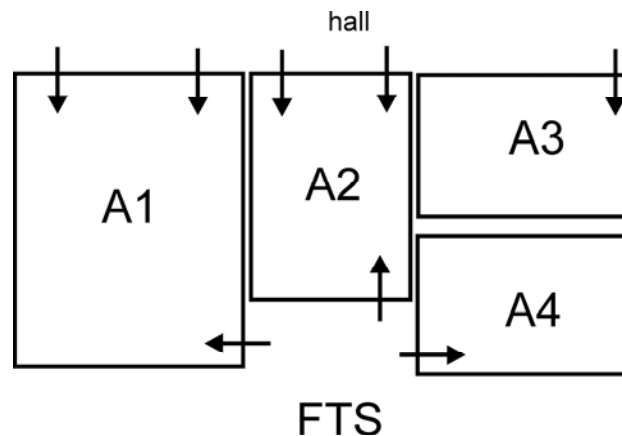
How to Improve Image and Impact of Fractional Calculus Research Community
Organizers: YangQuan Chen, Vasily Tarasov, Dumitru Baleanu and Dragan T. Spasic

16:45-17:00 [FTS, A1] Closing ceremony

17:00 A visit to Petrovaradin Fortress and its underground military galleries that made it unconquerable

{To reach the fortress one has to walk 15 minutes, go across the bridge and climb 214 stairs}

{If needed a bus transportation can be organized}



Applications

- A11: *Analysis of Lisbon public transport network in the perspective of fractional dynamics*, Antonio D. F. Santos, Duarte Valerio, J.A. Tenreiro Machado, A.M. Lopes
- A12: *Time-based fractional viscosity model for semisolid foodstuffs*, Xu Yang, Wen Chen, HongGuang Sun
- A13: *A Survey on fractional-order modeling methods for batteries*, Lun Zhai, Yan Li, Guohui Tian, Wen Chen, Yangquan Chen
- A14: *La Maja Medio Desnuda y Medio Vestida*, J. Tenreiro Machado, J. P. Galhano Tenreiro, Alexandra M. Galhano
- A16: *An optical flow model with fractional derivatives for detecting motion in a sequence of images*, Somayeh Gh. Bardeji, Isabel N. Figueiredo, Ercilia Sousa
- A17: *Fractional calculus in economic growth modelling: The economies of France and Italy*, Ines Tejado, Duarte Valerio, Emiliano Perez and Nuno Valerio
- A18: *Fractional-order speech prediction*, Vladimir Despotovic and Tomas Skovranek

Biomechanics

- B11: *A simplified model to characterize drug effect in the body*, Clara Ionescu
- B12: *Dynamical behaviors of fractional order HIV model*, Sadia Arshad, Dumitru Baleanu, Yifa Tang

- B13: *Fractional dynamic modelling of bone metastasis, microenvironment and therapy*, Duarte Valerio, Rui Moura Coelho, Susana Vinga
- B14: *The influence of 12-monoketocholic acid on methotrexate oral absorption in the rat by the means of fractional calculus*, M. Mikov, S. Golocorbin-Kon, N. Grahovac, M. Zigic, D.T. Spasic
- B17: *Artifact cancellation using median filter, moving average filter, and fractional derivatives in biomedical signals*, N. Popovic, N. Miljković, O. Djordjevic, T.B. Sekara

Control

- C11: *Fractional-order identification and control of heating processes with Non-Continuous Materials*, R. Caponetto, F. Sapuppo, V. Tomasello, G. Maione, P. Lino
- C13: *Analysis of the control energy for first order plus time delay plants with fractional integral controllers*, Norelys Aguila-Camacho, YangQuan Chen, Manuel A. Duarte-Mermoud
- C14: *Fractional linear feedforward design : Application to the cruise control of an electric vehicle*, A. Taymans, P. Melchior, R. Malti, F. Aioun, F. Guillemard, A. Serval
- C15: *The controllability of fractional damped dynamical systems with time-varying delays in control*, B.-B. He, H.-C. Zhou, Ch.-H. Kou
- C17: *Optimized fractional order controller for multiple time delay systems*, C. Yeroglu, A. Ates
- C19: *An indirect discretization method for fractional order PID controllers*, C. I. Muresan, R. De Keyser, C. Ionescu

- C21: *Observability and observation of commensurate order fractional*
M. Tari, N. Maamri, J.-C. Trigeassou
- C23: *Toward a CRONE toolbox for the design of full MIMO controllers,*
P. Lanusse, D. Nelson-Gruel, A. Lamara
- C25: *CRONE control of a heating system to improve wind turbine operation during frost episode,* J. Sabatier, P. Lanusse, B. Feytout, S. Gracia
- C27: *Hierarchical control research of active 4WS vehicle,* J. Tian, H. Chen, L. Tang, N. Chen
- C29: *Decoupling and fractional robust control of 4WS vehicles,* J. Tian, L. Tang, N. Chen, J. Yang
- C31: Fractional control strategy for nonlinear vehicle suspension,
P. Wang, Y. Tai, N. Chen
- C33: PI controller design for fractional order systems with labVIEW,
A. Yüce, F. Nur Deniz, N. Tan
- C35: Particle Swarm optimization algorithm in fractional order PID controller design, R. Rusu-Both, E.-H. Dulf, D. Timis, C.I. Muresan
- C37: *Robust adaptive control for a class of nonlinear fractional-order systems,* S. Zhang, Y. Yu, Y.Q. Chen
- C39: *Robust control system design of a turbofan engine,*S. Victor, A. Taymans, P. Melchior
- C41: *Fractional-order PI control of PMSM drives in nested loops,*
P. Lino, G. Maione, N. Salvatore, S. Stasi
- C43: A novel ARX-based discretization method for linear non-rational systems, M. Bošković, T.B. Sekara, M.R. Rapaic, M.P. Lazarevic, P. Mandic
- C45: *Time-domain subspace system identification with fractional differentiation models: a study of filtering methods,*
E. Ivanova, R. Malti and X. Moreau
- C47: *Stabilization of a class of fractional-order chaotic systems with order lying in (1,2),* L. Chen, R. Wu, W. He, Y. He
- C49: *Lag and lead fractional-order compensators design,* R. El-Khazali
- C51: *A new fractional adaptive terminal sliding mode controller for continuous stirred tank reactor with observer and uncertainty,* H. Delavari, B. Ghanbari, D. Baleanu
- C55: *Open-closed-loop fractional-order iterative learning control for singular fractional order system,* B. Cvetkovic, M. P. Lazarevic, N. Djurovic, P.D.Mandic
- C57: *Stabilization of the cart pendulum system by fractional order control with experimental realization* P.D. Mandic, M.P. Lazarevic, T. B. Sekara, R.Z. Jovanovic
- C59: *Stability of fractional incommensurate systems,* M.R. Rapaic, R. Malti
- C61: *Adaptive estimation of the gain, order and delay for a class of Fractional-Order Systems,* M.N. Kapetina, M.R. Rapaic, A. Pisano, Z.D. Jelcic
- C67: *PI-PD controller design for fractional order plant using standard forms,* F. Nur Deniz, A. Yüce, N. Tan

C69: *Robust fractional order PI controller design for nonlinear systems via singular perturbations technique*, M.L. Wardi, M. Amairi, M.N. Abdelkrim

C71: *Distributed order PID optimization by minimization of combination of integral of positive and negative response parts*, B.B. Jakovljevic, T.B. Sekara, Z.D. Jelcic, M.C. Boskovic, M.N. Kapetina

Engineering

E11: *Axisymmetric problems of thermoelasticity based on the space-time fractional heat conduction equation*, Y.Z. Povstenko

E12: *Dynamic behaviour of cracked viscoelastic 2D solid via BIEM*, T. Rangelov, P. Dineva

E14: *Partial differential equations for calculating exiting oil pressure*, F. Brambila Paz, R. Rosas Sampayo, B.F. Martinez Salgado

E15: *Vibration of an orthotropic nanoplate resting on a viscoelastic foundation: nonlocal and fractional derivative viscoelasticity approach*, M.S. Cajic, M.P. Lazarevic, H.G. Sun, D.Z. Karlicic, W. Chen

E16: *Fractional Jeffreys' fluids: thermodynamic constraints, Stokes' first problem and subordination*, E. Bazhlekova

E17: *A Transient Analysis for Cole-Cole model of complex dielectric permittivity by using fractional calculus*, B. Baykant Alagoz, G. Alisoy, S. Alagoz, H. Alisoy

E18: *Zener wave equation: hereditary and non-local effects*, T. Atanackovic, G. Hormann, M. Janev, Lj. Oparnica, S. Pilipovic, D. Zorica

E21: *Active wave control of a thin beam based on fractional derivative feedback*, M. Kuroda, H. Matsubuchi

E22: *On Fractional Peridynamic Deformations*, A.K. Lazopoulos

E23: *Implementation of fractional order filters by embedded programming techniques*, G. Kavuran, B. Baykant Alagoz, A. Ates, C. Yeroglu

E25: *Identification and performance analysis of a fractional order impedance model for various test solutions*, D. Copot, R. De Keyser, C. Ionescu

E26: *Modelling combustion in internal combustion engines using the Mittag-Leffler function*, S. Samuel, J. Ricon, I. Podlubny

E29: *Ubiquitous fractional order capacitors*, W. Wang, Y. Li, YQ. Chen

E31: *Modeling of heat transfer process in non-solid media*, P. Sakrajda, D. Sierociuk

E33: *Conformable heat problem in a cylinder*, D. Avci, B.B. Iskender Eroglu, N. Ozdemir

E34: *On creep/recovery and pulse heating models*, N.M. Grahovac, M.M. Zigic, A. Okuka, D.T. Spasic

General Problems

G11: *Lyapunov stability of nonlinear fractional systems: the Van der Pol oscillator*, J.-C. Trigeassou, N. Mamri, A. Oustaloup

G12: *Connecting complexity with spectral entropy using the Laplace transformed solution to the fractional diffusion equation*, Y. Liang, W. Chen, R.L. Magin

- G13: *On time-fractional nature of open system dynamics*, V. V. Uchaikin
- G14: *Variable-order fractal derivative anomalous diffusion model*, X. Liu, H.G. Sun, Z. Fu
- G15: *Optimal instrumental variable method for order and coefficients estimation of continuous-time linear parameter varying systems with fractional models*, T. Salem, M. Chetoui, M. Aoun
- G16: *Conception of the fractal experiment: New possibilities in quantitative description of quasi-reproducible measurements*, Raoul R. Nigmatullin
- G17: *Anomalous fractional diffusion: some consequences of selfsimilarity*, V.V. Uchaikin, R.T. Sibatov
- G18: *Diffusivity identification in an anomalous nonlinear diffusion*, L. Plociniczak
- G19: *Stabilization for the time fractional diffusion system with uncertain disturbance on the boundary*, F. Ge, Y.Q. Chen, Ch. Kou
- G21: *Interpretation of grain boundary diffusion in terms of fractional calculus*, R.T. Sibatov, V.V. Svetukhin
- G24: *Densities of accelerating subdiffusion in field of external potential*, J. Gajda, W. Mydlarczyk
- G25: *Initial conditions for output-additive variable fractional-order definition variable fractional-order definition*, M. Macias
- G26: *Quantum mechanics on the fractal time-space*, A. Khalili Golmankhaneh

- G28: *Variational problems with Lagrangians containing Riemann-Liouville derivatives of complex fractional order and their approximate Euler-Lagrange equations*, T. Atanackovic, M. Janev, S. Pilipovic, D. Zorica

- G30: *Complex fractional Zener model of wave propagation in viscoelastic media*, S. Pilipovic

- G34: *Fractional differential geometry of curves & surfaces*, K.A. Lazopoulos

Mathematical Analysis

- M11: *Existence of solutions for fractional differential inclusions with "maxima"*, A. Cernea

- M12: *Regularization of derivatives by fractional velocity*, D. Prodanov

- M13: *An addition formula for parabolic cylinder function associated with Weyl fractional derivative of Gaussian function*, A. Ansari

- M14: *Method of upper and lower solutions for nonlinear fractional integro-differential equations with advanced arguments*, N. Khodabakhshi

- M15: *Accurate relationships between fractals and fractional integrals: new approaches and evaluations*, R. R. Nigmatullin, I. Gubaidullin, W. Zhang

- M16: *Fractional eigenvalue problem in terms of generalized function-dependent fractional derivatives*, M. Klimek, M. Bejm

- M17: *Search method based on fractional Fibonacci sequence*, G.-Ch. Wu, D. Baleanu, L.-L. Huang

- M18: *Generalized uniformly continuous solution operators and inhomogeneous fractional evolution equations with variable coefficients*, M. Japundzic, D. Rajter-Ciric
- M21: *Calderon's formula for fractional wavelet transform*, S.K. Upadhayay, J. Kumar Dubey
- M22: *Levy walks with slowly varying jumps - a link to fractional material derivative of distributed order-type*, M. Teuerle, M. Magdziarz
- M23: *Impulsive fractional differential equations under uncertainty*, S. Salahshour, A. Ahmadian, F. Ismail, D. Baleanu
- M24: *Explicit solutions to FPDEs via the Fokas method and fundamental solutions*, A. Fernandez
- M25: *Complex motions in simple fractional nonlinear autonomous systems*, B. Datsko, B. Meleshko
- M27: *Generalized differential transform method for fractional partial differential equations*, M. Yavuz, N. Özdemir, Y. Yolcu Okur
- M31: *Series in 3-parameter Mittag-Leffler functions – various convergence theorems*, J. Paneva-Konovska
- M33: *Ulam - Hyers stability of fractional nabla difference equations*, J. M. Jonnalagadda
- M35: *Variable–fractional–order linear time–invariant system–description and response*, P. Ostalczyk, D. Mozyrska
- M37: *Existence results for fractional stochastic semilinear evolution equations with nonlocal conditions*, R. Chaudhary, D. N. Pandey

Numerical Methods

- N11: *Finite difference methods with non-uniform meshes for nonlinear fractional differential equations*, Ch. Li, Q. Yi, A. Chen
- N12: *On the computation of the Mittag-Leffler function*, M.D. Ortigueira, A.M. Lopes, J.A.T. Machado
- N14: *Computational models for fractional dynamical systems*, F. Liu, I. Turner, K. Burrage
- N17: *Applicability of homotopy perturbation method for analytical solution of fractional order nonlinear systems*, A. Ates, B.B. Alagoz, C. Yeroglu
- N18: *Numerical approaches to unidirectional viscoelastic flows with fractional derivative models*, I. Bazhlekova, E. Bazhlekova
- N19: *Jacobi collocation method for fractional-integro differential equations*, S. Sharma, R.K. Pandey
- N21: *Approximate numerical solutions of fractional model of linear delay differential equation using legendre scaling functions*, H. Singh, R.K. Pandey
- N22: *Oscillation results for a class of nonlinear fractional order equations*, S. Aslyuce, A. F. Guvenilir, A. Zafer
- N23: *A numerical method for fractional order differential algebraic equations based on sliding mode control*, Y. Tai, N. Chen, P. Wang

Mini-Symposia on Recent Trends in Numerical Methods for Fractional PDEs

- S11: *A parallel meshless solver for time fractional diffusion-wave equation via collocation Trefftz method*, Z.-J. Fu, Q. Xi
- S13: *Fast solver for fractional differential equations based on hierarchical matrices*, X. Zhao, X. Hu, W. Cai, G. Em Karniadakis
- S14: *Rational approximation to the fractional Laplacian*, L. Aceto, P. Novati
- S15: *Numerical solution of Maxwell's equations in fractional dielectrics of Havriliak-Negami type*, R. Garrappa
- S16: *On the numerical solution of time-fractional Schrodinger equations*, R. Garrappa, I. Moret, M. Popolizio
- C65: *Discrete-time variable-projection method for fractional order system identification*, M. Harker, P. O'Leary

Posters

- B10: *On fractional methotrexate deposition/restoring model in the presence of pleural effusion*, J. Kolarovic, M.M. Zigic, N.M. Grahovac, M. Mikov, D.T. Spasic
- C10: *Multivariable fractional order PID control of the cryogenic process of mixing of two gaseous airs flows: D decomposition method*, Lj. Bucanovic, M.P. Lazarevic, P.D. Mandic, T.B. Sekara
- E10: *A seismic protection system comprising an active device, fractional damping and dry friction*, A.S. Okuka, N.M. Grahovac, M.M. Zigic, D.T. Spasic