

	SALA 1	SALA 2	SALA 3	
Monday morning				
8:30-09:30	Documentation delivery			
Session	PC1& 2: Plenary Conference			
Chairman	C. Amrouche (Chairman)			
09:00-09:50	F. Boyer(PC)			
	Convergence analysis of the upwind scheme for the transport equation with boundary data			
09:50-10:40	P. Drabek(PC)			
	Fisher-Kolmogorov equation with a non-Lipschitzian reaction term			
10:40-11:00	Coffee break			
11:00-13:00	S11: Elliptic and Parabolic PDE	S12: Geometric uncertainties		
	Ch. Amrouche (Chairman)	M. Dambrine (Chairman)		
11:00-11:30	C. Stuart	M. Dambrine		
	Criteria for the existence of a potential well	Numerical Solution of the Poisson Equation on Domains with a Thin Layer of Random Thickness		
11:30-12:00	J. Giacomoni	E. Savin		
	An extension of Diaz-Saa Inequality and uniqueness results for variable exponents problems	Sparse polynomial surrogates for uncertainty quantification in computational fluid dynamics		
12:00-12:30	S. Prashanth	Ch. Dapogny		
	Analytic bifurcation for very singular elliptic problems	A Deterministic Approximation Method For Shape Optimization Problems Under Random Uncertainties		
12:30-13:00	J. P. Gossez	H. Harbrecht		
	Elliptic equations involving the p-Laplacian and a gradient term	Shape optimization for quadratic functionals and states with random right-hand sides		
13:30-15:00	Lunch			
Session	S21: Elliptic and Parabolic PDE	S22: Time integrator and coupled PDE	S23: Appl. Maths.	
Chairman	P. Takac (Chairman)	P. Poncet (Chairman)	V. Lanchares (Chairman)	
15:00-15:30	J. Hernández	M. Tokman	C. Ferreira	
	Linearized stability for solutions to nonlinear degenerate and singular parabolic equations	Techniques for constructing efficient exponential methods of EPIRK type and their applications	Generalization of Zernike basis for a variety of important optical apertures	
15:30-16:00	C. Amrouche	R. Chatelin	R. Villacampa	
	On Poincaré's and Lions' lemmas and on De Rham's theorem	Particle methods for non-linear Stokes equations coupled to transport of heterogeneity	Invariant compact solutions to the heterotic equations of motion	
16:00-16:30	B. Alziary	L. Hume	Y. Zaim	
	On the Heston model in mathematical finance: An analytic approach by PDEs	Transport and pore scale modeling of porous media	Extension and construction of Quasi-Wilson and modified Quasi-Wilson finite elements	
16:30-17:00	M. Cuesta		J. Palafox	
	On abstract indefinite concave-convex problems and applications to quasilinear elliptic equations		Symmetries, integrability and module of logarithmic vector fields	
17:00-17:30	Coffee break			Poster session
				M. Palacios (Chairman)
Session	PC3 & 4: Plenary conference		Navascués	Trend curves for historic data
Chairman	J. Giacomoni (Chairman)		E. Pérez	Orthogonal basis with an OTF first mode for shape specification of eyes
17:30-18:20	M. Bozzini			
	New radial kernels and wavelets			
18:20-19:00	L. Rández			
	Ars Qubica			
19:00-20:00	Official opening ceremony in the presence of the presidents:			
	Rector de la Universidad de Zaragoza and Monsieur le Président de l'Université de Pau			
20:00	Reception			
Tuesday morning				

Session	PC5 & PC 6: Plenary Conference		
Chairman	J. L. Gracia (Chairman)		
09:00-09:50	E. O'Riordan		
	Modelling and numerical methods for convection-diffusion problems with dominating convective term		
09:50-10:40	J. J. Egozcue		
	Compositional data and the geometry of the sample space		
10:40-11:00	Coffee break		
Session	S31: PDE convection-diffusion	S32: Statistical Inference	S33: Ferromagnetism modelling and Appl. Maths.
Chairman	J. L. Gracia (Chairman)	J. J. Egozcue (Chairman)	G. Carbou (Chairman)
11:00-11:30	R. Bermejo	P. Jodrá	M. Osama
	A local projection stabilized Lagrange-Galerkin method for convection-diffusion equations	A new two-parameter probability distribution with bounded support	Numerical integration under certain type of convexity
11:30-12:00	G. Hauke	V. Pawlowsky-Glahn	A. Nafidi
	VMS error estimation for computational fluid mechanics	Exploratory analysis of compositional data	A new homogeneous lognormal diffusion process with exogenous factors in diffusion coefficient
12:00-12:30	J. C. Jorge	M. Ortego	S. Labbé
	An alternating direction method for solving 2D convection-diffusion problems with time dependent boundary conditions	Watch out, spurious correlations ahead!	Asymptotic in ferromagnetism modeling
12:30-13:00	C. Clavero	M. V. Alba-Fernández	A. K. Al Sayed
	Efficient numerical methods for coupled singularly perturbed systems of reaction-diffusion type	Confusion matrix control using penalized divergences	Domain wall in bent ferromagnetic nano-wire
13:00-13:20	D. Irisarri		
	Numerical approximation of singularly perturbed reaction-diffusion problems with the virtual element method		
13:30-15:00	Lunch		
Session	S41: Fractional Differential Equations	S42: Fluid Mechanics	S43: Fluid Mechanics
Chairman	C. Clavero (Chairman)	Ch. Amrouche (Chairman)	Sophie Mercier (Chairman)
15:00-15:30	J. Cresson	A. Ghosh	P. Patie
	An algebraic approach to fractional derivatives	Stokes equation with Navier boundary condition	Spectral representation of the solution to the Cauchy problem associated to fractional operators
15:30-16:00	J. L. Torrea	H. Al Baba	F. Avram
	Lateral fractional derivatives	Maximal $L^p - L^q$ regularity to the Stokes Problem with Navier boundary conditions	Managing central branch risk networks using spectrally negative Lévy models and scale functions
16:00-16:30	J. L. Gracia	M. A. Rodríguez	
	On the convergence of a finite difference scheme for a time fractional-diffusion equation	Stability results for nematic liquid crystals	
16:30-17:00	M. de León	J. Orellana	
	Non-Local Fractional Derivatives. Discrete And Continuous	Surface water waves in the vicinity of a solid body	
17:00-17:30	Coffee break		
Session	PC 7 & 8: Plenary Conference		
Chairman	C. Clavero (Chairman)		
17:30-18:20	L. Vázquez		
	Fractional Calculus As A Modelling Framework		
18:20-19:10	T. Sauer		
	Sparse exponentials and monomials, superresolution and an old trick		
Wednesday			
Session	PC 9 & 10: Plenary Conference		
Chairman	P. Yanguas (Chairman)		
09:00-09:50	A. Pröhl		
	On Optimal Stochastic Control in Ferromagnetism		

09:50-10:40	M. Tokman		
	Exponential Time Integrators: Theory and Practice		
10:40-11:00	Coffee break		
Session	S51: Stochastic EDP	S52: The problem of N+1 bodies	S53: Appl. Maths.
Chairman	G. Vallet (Chairman)	T. Kalvouridis (Chairman)	J. Carnicer (Chairman)
11:00-11:30	G. Vallet	P. Yanguas	Y. Khier
	Some stability results for stochastic conservation laws	Near-rectilinear quasi-periodic trajectories in the three-body	On the stability of interpolation formulae
11:30-12:00	A. Zimmerman	V. Lanchares	M. Floater
	Existence of martingale solutions to a pseudomonotone evolution equation with multiplicative noise	The restricted 2 + 2 body problem and the capture of irregular moons	Optimal spline spaces for L2 n-widths
12:00-12:30	A. Pröhl	M. Palacios	J. Delgado
	Numerical analysis for the stochastic Cahn-Hilliard equation near the sharp interface limit	Equilibrium points in the tri-dimensional photo-gravitational four bodies problem	High relative accuracy for some subclasses of totally positive matrices
12:30-13:00	C. Bauzet	D. Casanova	A. Barreras
	Convergence of monotone finite volume schemes for hyperbolic scalar conservation laws with a multiplicative stochastic force	Satellite constellations: properties and applications	Some extensions on Total Positivity
13:30-15:00	Lunch		
15:00-20:00	Excursion		
15:00	Bus departure from the Residence		
	Visit to Santa Elena chapel and Tramacastilla de Tena and a little walking (50 min.) to Piedrafita de Jaca		
19:30/20:00	Return to Jaca		
21:00	Conference Dinner		
Thursday morning			
Session	PC 11 & 12: Plenary Conference	S62: Applied probability and Statistics	S63: Geometry
Chairman	C. Amrouche (Chairman)	S. Mercier (Chairman)	E. Artal (Chairman)
9:00-9:50	V. Bonnaillie-Nöel(PC)	09:00-09:30 C. Sanguesa	J. I. Cogolludo
	Minimal k-partition for the p-norm of the eigenvalues	A System with Stochastically Dependent Failure Modes with Shock-Accumulation Effect	Quotient surface singularities and lattice point counting
		09:30-10:00 C. Paroissin	
		Inference for the Wiener process with random initiation time	
10:00-10:50	M. Tucsnak(PC)	10:00-10:30 L. Bordes	María Pe
	The piston problem: Modelling, Analysis and Control	Semiparametric consistent estimators for virtual age models under right censoring	Valuative Criterion, Arcs and Adjacencies of Plane Curves
10:50-11:20	Coffee break		
Session	PC 13 & 14: Plenary Conference	S72: Applied probability and Statistics	
Chairman	M. Arribas (Chairman)	C. Paroissin (Chairman)	
11:20-12:10	F. Sueur(PC)	11:20-11:50 F. G. Badia	J. Vallés
	Controllability of the Navier-Stokes equations with Navier slip-with-friction boundary conditions	Stochastic comparisons and ageing properties of Polya processes	Ramification curve associated to a rank two vector bundle
		11:50-12:20 Cárcamo, J.	
		Probability distances to the exponential class provide insight into classifying X-ray astronomy data	
12:10-13:00	T. Kalvouridis(PC)	12:20-12:50 S. Mercier	E. Artal
	The regular polygon problem of N+1 bodies: the past, the present and the future	On the stochastic comparison of two models of imperfect repairs for a gamma deteriorating system	Bernstein-Sato polynomial and Yano's conjecture
13:30-15:00	Lunch		