Program of Exact Renormalizaiton Group 2020 Nov. 2-6, 2020

Note: program is scheduled in JST (GMT+9)

Last updated: 30th Oct

Time	Nov.2 (Mon)	Nov.3 (Tue)		Nov.4 (Wed)		Nov.5 (Thu)		Nov.6 (Fri)	
Morning(9:00-12:20)		Parallel 1a Chair: K. Fukushima	Parallel 1b Chair: R. Rossi	Plenary 3-1 Chair: A. Stergiou		Parallel 5a Chair: A. Ohnishi	Parallel 5b Chair: B. Knorr	Plenary 4-1 Chair: T. Kunihiro	
(9:00-9:40)		J. Eser	P. Scior	B. Knorr (GMT-5)		P. Jizba	Y. Meurice	M. Carrington (GMT-6)	
		W.-j. Fu	A. Ohnishi			K. Otto	G. Johnson		
(9:40-10:20)		S. Yin	K. Itoh	T. Takayanagi		R. Banerjee	N. Wschebor	R. Rossi (GMT-5)	
		Y. Hamada				A. Pereira	G. De Polsi		
break									
		Poster 1 (6)		Plenary 3-2 Chair: H. Kawai		Open Slot		Plenary 4-2 Chair: H. Suzuki	
(10:40-11:20)		Tomaz, Chen, Mashiko, Shimazaki, Wen, Zhang		T. Kunihiro				A. Stergiou (GMT-7)	
(11:20-12:00)				M. Tsuchiizu(11:20-11:45)				Y. Nakayama	
				H. Yamase(11:45-12:10)					
lunch	opening (13:50-14:00)								
Afternoon(14:00-19:00)	Plenary 1-1 Chair: N. Ohta	Plenary 2-1 Chair: R. Percacci		Parallel 3a Chair: N. Ohta	Parallel 3b Chair: Y. Horinouchi	Parallel 6a Chair: S. Mukohyama	Parallel 6b Chair: L. Canet	Parallel 9a Chair: P. Millington	Parallel 9b Chair: A. Ohnishi
(14:00-14:40)	M. Salmhofer (GMT+1)	H. Kawai		H. Kitamoto	H. Sonoda	C. Pagani	B. Faigle-Cedzich	S. Nagy	
				J. Ziebell	S. Harribey	M. Altaisky	P. Bonetti	R. Percacci	S. Yabunaka
(14:40-15:20)	N. Defenu (GMT+1)	A. Eichhorn (GMT+1)		C. Schneider	J. Kwapisz	G. Gionti,S.J.	R. Daviet	T. Morris	S. Sarkar
				R. Ben Ali Zinati	O. Zanusso	C. Fontaine	T. Yokota	F. Saueressig	N. Tetradis
break									
	Plenary 1-2 Chair: J. P. Blaizot	Plenary 2-2 Chair: K.-I. Aoki		Parallel 4a Chair: T. Baldauf	Parallel 4b Chair: K. Itoh	Parallel 7a Chair: S. Reffert	Parallel 7b Chair: K. Fukushima	Plenary 5-1 Chair: W. Metzner	
(15:40-16:20)	B. Delamotte (GMT+1)	F. Rennecke (GMT+1)		A. Held	G. Savvidy	T. Steudtner	M. Scherer	N. Dupuis (GMT+1)	
				K. Falls	F. J. Ihssen	Y. Kluth	P. Zdybel		
(16:20-17:00)	P. Millington (GMT+0)	H. Suzuki		L. Rachwal	M. Huber	M. Schiffer	A. Chlebicki	L. Canet (GMT+1)	
				A. Salek	R. Alkofer	M. Pauly	D. Kiese		
break									
	Plenary 1-3 Chair: A. Ohnishi	Parallel 2a Chair: A. Eichhorn	Parallel 2b Chair: S. Mukohyama	Poster 2 (12)		Parallel 8a Chair: K. Itoh	Parallel 8b Chair: N. Defenu	Plenary 5-2 Chair: M. Salmhofer	
(17:20-18:00)	C. Wetterich (GMT+1)	A. Pithis	N. Wink	Koenigstein, Schuh, Steil, Zappala, Hille, Heinzelmann, Busch, Fejos, Niggemann, Wang, Dutta, Horak		H. Gies	F. Isaule	S. Reffert (GMT+1)	
		C. Ripken	C. FLEMING			K. Moch	S. Mathey		
(18:00-18:40)	T. Baldauf (GMT+0)	M. Yamada	C. Cresswell-Hogg			M. Reichert	A. Fedorenko	Y. Horinouchi	
(extra 18:40-19:00)		G. P. de Brito	D. Litim			N. Benoit	D. Vilardi		
dinner		D. Benedetti	I. Balog					announcement of awards Closing	
Discussion 21:00-22:00	Remo	Remo		Remo		Remo		Remo	

Plenary talks [Zoom main]

last updated: 6th, Nov, 2020

			Institution	Title	Slide	Video
Nov 2 (Mon)	Plenary 1-1	Nov. 2, 14:00				
	Salmhofer	Manfred	Institut für theoretische Physik, Universität Heidelberg	Rigorous Renormalization Group	[Slide]	[Video]
	Defenu	Nicolo	Institute for Theoretical Physics, ETH Zürich	RG and FRG approach to the computation of non-universal quantities in the BKT transition	[Slide]	[Video]
	Plenary 1-2	Nov. 2, 15:40				
	Delamotte	Bertrand	Laboratory of Theoretical and Condensed Matter Physics, Sorbonne University, Paris	About the convergence of the derivative expansion	[Slide]	[Video]
	Millington	Peter	University of Nottingham	An alternative flow equation from the regulator-sourced 2PI effective action	[Slide]	[Video]
	Plenary 1-3	Nov. 2, 17:20				
	Wetterich	Christof	Heidelberg University Institute for Theoretical Physics	Fundamental Scale Invariance	[Slide]	[Video]
	Baldauf	Tobias	University of Cambridge	Effective Field Theory of Large-Scale Structure	[Slide]	[Video]
Nov 3 (Tue)	Plenary 2-1	Nov. 3, 14:00				
	Kawai	Hikaru	Dept. of Physics Kyoto University	Quantum Gravity and Naturalness	[Slide]	[Video]
	Eichhorn	Astrid	CP3-Origins, University of Southern Denmark, Odense	Frontiers of quantum gravity	[Slide]	[Video]
	Plenary 2-2	Nov. 3, 15:40				
	Rennecke	Fabian	Brookhaven National Laboratory	QCD from an FRG perspective	[Slide]	[Video]
	Suzuki	Hiroshi	Kyushu University	Gradient flow and the Wilsonian renormalization group flow	[Slide]	[Video]

Nov 4 (Wed)	Plenary 3-1	Nov. 4, 09:00				
	Knorr	Benjamin	Perimeter Institute for Theoretical Physics	Form Factors in Quantum Gravity - from their computation to scattering amplitudes	[Slide]	[Video]
	Takayanagi	Tadashi	YITP, Kyoto	Developments of Path-integral Optimization	[Slide]	[Video]
	Plenary 3-2	Nov. 4, 10:40				
	Kunihiro	Teiji	Yukawa Institute for Theoretical Physics, Kyoto University	Funtional-Renormalization-Group Derivation of Density Functional Theory for Superfluid Systems	[Slide]	[Video]
	Tsuchiizu	Masahisa	Nara Women's University	Electronic nematic transitions in cuprate superconductors		
	Yamase	Hiroyuki	International Center for Materials Nanoarchitectonics, National Institute for Materials Science	Application of functional RG to the superfluid phase stiffness and BKT temperature in 2D Hubbard model	[Slide]	[Video]
Nov 6 (Fri)	Plenary 4-1	Nov. 6, 09:00				
	Carrington	Margaret	Brandon University	Renormalized thermodynamics from an nPI effective action	[Slide]	[Video]
	Rossi	Riccardo	Center for Computational Quantum physics, Flatiron Institute	High-order renormalized perturbative expansions with Diagrammatic Monte Carlo	[Slide]	[Video]
	Plenary 4-2	Nov. 6, 10:40				
	Stergiou	Andreas	Los Alamos National Laboratory	Conformal Bootstrap and Critical Phenomena	[Slide]	[Video]
	Nakayama	Yu	Rikyo University	Functional renormalization group approach to dipolar fixed point which is scale invariant but non-conformal	[Slide]	[Video]
	Plenary 5-1	Nov. 6, 15:40				
	Dupuis	Nicolas	Laboratoire de Physique Théorique de la Matière Condensée, Sorbonne university & CNRS	FRG and disordered systems	[Slide]	[Video]
	Canet	Léonie	University Grenoble Alpes	Time dependence of correlation functions in homogeneous and isotropic turbulence.	[Slide]	[Video]
	Plenary 5-2	Nov. 6, 17:20				
	Reffert	Susanne	ITP, University of Bern	The large quantum number expansion	[Slide]	[Video]
	Horinouchi	Yusuke	Department of Physics, University of Tokyo	Renormalization-group limit cycle in Efimov physics	[Slide]	[Video]

Parallel sessions [Zoom main (a), parallel (b)]						
Nov 3 (Tue)	Parallel 1a	Nov. 3, 9:00-				
	Eser	Juergen	Goethe University Frankfurt	Low-energy couplings from the FRG	[Slide]	[Video]
	Fu	Wei-jie	Dalian University of Technology	QCD phase transition within the fRG approach	[Slide]	[Video]
	Yin	Shi	School of Physics, Dalian University of Technology	Hyper-order baryon number fluctuations at finite temperature and density	[Slide]	[Video]
	Hamada	Yu	Kyoto University	Gravitational instantons and anomalous chiral symmetry breaking	[Slide]	[Video]
	Parallel 1b	Nov. 3, 9:00-				
	Scior	Philipp	Bielefeld University	Spectral functions from the real-time functional renormalization group	[Slide]	[Video]
	Ohnishi	Akira	Yukawa Institute for Theoretical Physics, Kyoto University	Replica evolution of classical field in 4+1 dimensional spacetime as a simulator of quantum field evolution	[Slide]	[Video]
	Itoh	Katsumi	Department of Education, Niigata University	RG flows and WT identity for QED	[Slide]	[Video]
	Parallel 2a	Nov. 3, 17:20-				
	Pithis	Andreas	University of Heidelberg, SISSA	The phase diagram of the ABAB multi-matrix model from functional Renormalization	[Slide]	[Video]
	Ripken	Chris	Johannes Gutenberg-Universität Mainz	Graviton-mediated scattering amplitudes from the Quantum Effective Action	[Slide]	[Video]
	Yamada	Masatoshi	Institute for theoretical physics, Heidelberg University	Quantum gravity from hidden local Lorentz symmetry	[Slide]	[Video]
	de Brito	Gustavo Pazzini	CP3-Origins, University of Southern Denmark	Unimodular Quantum Gravity: Steps Beyond Perturbation Theory	[Slide]	[Video]
	Benedetti	Dario	Centre de Physique Théorique, Ecole Polytechnique, CNRS	Melonic field theories	[Slide]	[Video]
	Parallel 2b	Nov. 3, 17:20-				
	Wink	Nicolas	Heidelberg University	Spectral functions from the FRG and their application	[Slide]	[Video]
	FLEMING	Claude	Theorethical physics laboratory of condensed matter (LPTMC), Sorbonne University	Finite N origin of the Bardeen-Moshe-Bander phenomenon and its extension at N=∞ by singular fixed points	[Slide]	[Video]
	Cresswell-Hogg	Charlie	University of Sussex	Asymptotic safety of fermionic field theories	[Slide]	[Video]
	Litim	Daniel	University of Sussex	Strongly interacting UV fixed points	[Slide]	[Video]
	Balog	Ivan	Institute of Physics, Zagreb	Nonperturbative Renormalization Group approach to the lower critical dimension in systems with discrete symmetry	[Slide]	[Video]

Nov 4 (Wed)	Parallel 3a	Nov. 4, 14:00				
	Kitamoto	Hiroyuki	Frontier Research Institute for Interdisciplinary Sciences, Tohoku University	Infrared resummation for derivative interactions in de Sitter space	[Slide]	[Video]
	Ziebell	Jobst	Theoretisch-Physikalisches Institut, Friedrich-Schiller-Universität Jena	Existence and construction of exact FRG flows of a UV-interacting scalar field theory	[Slide]	[Video]
	Schneider	Coralie	Institute for Theoretical Physics, Heidelberg University	Landau gauge Yang-Mills correlation functions and modified Slavnov-Taylor identities	[Slide]	[Video]
	Ben Ali Zinati	Riccardo	LPTMC, Sorbonne Université & CNRS, Paris	Platonic field theories	[Slide]	[Video]
	Parallel 3b	Nov. 4, 14:00				
	Sonoda	Hidenori	Physics Department, Kobe University	Products of Current Composite Operators in the ERG formalism	[Slide]	[Video]
	Harribey	Sabine	Centre de Physique théorique, Ecole Polytechnique	Long-range multi-scalar models at three loops	[Slide]	[Video]
	Kwapisz	Jan	Institute for Theoretical Physics, University of Warsaw	Renormalization group procedure for potential g/r^2	[Slide]	[Video]
	Zanusso	Omar	University of Pisa	Symmetry from universality	[Slide]	[Video]
	Parallel 4a	Nov. 4, 15:40				
	Held	Aaron	Imperial College London	Effective asymptotic safety and the CKM sector	[Slide]	[Video]
	Falls	Kevin	Scuola Internazionale Superiore di Studi Avanzati	Towards the determination of the dimension of the critical surface in asymptotically safe gravity	[Slide]	[Video]
	Rachwal	Leslaw	Federal University of Juiz de Fora, Brazil	Effective Action from the Functional Renormalization Group	[Slide]	[Video]
	Salek	Abdol Sabor	Institute for Theoretical Physics, Friedrich Schiller University Jena	Curvature bound from gravitational catalysis in thermal backgrounds	[Slide]	[Video]
	Parallel 4b	Nov. 4, 15:40				
	Savvidy	George	Demokritos National Research Centre, Athens, Greece	Chromomagnetic Gluon Condensation in QCD and Renormalisation Group	[Slide]	[Video]
	Ihssen	Friederike Juliane	Institute for Theoretical Physics, Heidelberg University	Resolving the QCD phase structure with Discontinuous Galerkin Methods	[Slide]	[Video]
	Huber	Markus	Institute of Physics, Giessen Unviersity	With functional methods from propagators and vertices to glueballs	[Slide]	[Video]
	Alkofer	Reinhard	Institute of Theoretical Physics, University Graz	Chiral symmetry breaking in gauge theories: Delicate and intricate!	[Slide]	[Video]

Nov 5 (Thu)	Parallel 5a	Nov. 5, 9:00				
	Jizba	Petr	Czech Technical University in Prague	Dark Side of Weyl Gravity	[Slide]	[Video]
	Otto	Konstantin	Institute for Theoretical Physics, Justus-Liebig University Giessen	Hybrid star observables from a non-perturbative quark matter equation of state	[Slide]	[Video]
	Banerjee	Rudrajit	University of Pittsburgh	The spatial FRG on cosmological spacetimes: from UV Hadamard condition to IR dimensional reduction	[Slide]	[Video]
	Pereira	Antonio	Fluminense Federal University	Renormalization group flows in unimodular quantum gravity	[Slide]	[Video]
	Parallel 5b	Nov. 5, 9:00				
	Meurice	Yannick	University of Iowa	Exact and approximate equations for Tensor RG	[Slide]	[Video]
	Johnson	Gregory	North Carolina State University	A First Functional Renormalization Group Study of the Universal Yang-Lee Edge Location in O(N) Models	[Slide]	[Video]
	Wschebor	Nicolás	Instituto de Física, Facultad de Ingeniería, Universidad de la República	Precision calculation of critical exponents in the O(N) universality classes with the nonperturbative renormalization group	[Slide]	[Video]
	De Polsi	Gonzalo	nstituto de Física, Facultad de Ciencias, Universidad de la República	Conformal Invariance and the Principle of Minimal Sensitivity	[Slide]	[Video]
	Parallel 6a	Nov. 5, 14:00				
	Pagani	Carlo	Univ. Grenoble Alpes, CNRS, LPMMC	Functional renormalization group approach to scalar turbulence	[Slide]	[Video]
	Altaisky	Mikhail	Space Research Institute RAS	Wavelet regularization of gauge theories	[Slide]	[Video]
	Gionti,S.J.	Gabriele	Specola Vaticana (Vatican Observatory)	Canonical Analysis of Brans-Dicke Theory Adresses Hamiltonian Inequivalence between Jordan and Einstein Frames	[Slide]	[Video]
	Fontaine	Côme	University Grenoble Alpes	FRG approach to spontaneous stochasticity	[Slide]	[Video]
	Parallel 6b	Nov. 5, 14:00				
	Bonetti	Pietro Maria	Max Planck Institute for Solid State Research, Stuttgart	Vertex bosonization in the Hubbard model: a new perspective	[Slide]	[Video]
	Daviet	Romain	Laboratoire de Physique Théorique de la matière Condensée	One dimensional interacting quantum fluids in the presence of disorder	[Slide]	[Video]
	Yokota	Takeru	The Institute for Solid State Physics, The University of Tokyo	Density functional theory for electron systems by the aid of functional renormalization group	[Slide]	[Video]

	Parallel 7a	Nov. 5, 15:40				
	Steudtner	Tom	Technische Universität Dortmund	Classifying Asymptotic Safety in Perturbatively Exact Gauge-Yukawa Theories	[Slide]	[Video]
	Kluth	Yannick	University of Sussex	Fixed Points of Quantum Gravity and the Dimensionality of the UV Critical Surface	[Slide]	[Video]
	Schiffer	Marc	Institute for Theoretical Physics, Heidelberg University	Chiral symmetry breaking in asymptotically safe quantum gravity	[Slide]	[Video]
	Pauly	Martin	Institute for Theoretical Physics, Heidelberg University	Towards implications of asymptotic safety in cosmology	[Slide]	[Video]
	Parallel 7b	Nov. 5, 15:40				
	Scherer	Michael	Institute for Theoretical Physics, University of Cologne	Functional RG approach to strongly-correlated states in moiré quantum materials	[Slide]	[Video]
	Zdybel	Piotr	Institute of Theoretical Physics, Faculty of Physics, University of Warsaw	Quantum Lifshitz points and fluctuation-induced first-order phase transitions in imbalanced Fermi mixtures	[Slide]	[Video]
	Chlebicki	Andrzej	Institute for Theoretical Physics, Faculty of Physics, University of Warsaw	Analyticity of the critical exponents in the O(N) models	[Slide]	[Video]
	Kiese	Dominik	Institute for Theoretical Physics, University of Cologne	Multiloop functional renormalization group approach to quantum spin systems	[Slide]	[Video]
	Parallel 8a	Nov. 5, 17:20				
	Gies	Holger	Institute for Theoretical Physics (TPI), Friedrich Schiller University Jena	UV completeness beyond the deep Euclidean region	[Slide]	[Video]
	Moch	Kevin	Theoretical Physics IV, Dortmund University	Fixed Points in MSSM Extensions	[Slide]	[Video]
	Reichert	Manuel	Department of Physics and Astronomy, University of Sussex	Electroweak baryogenesis: Linking gravitational waves to the Higgs-self coupling	[Slide]	[Video]
	Benoit	Nicholas James	Graduate School of Science, Hiroshima University	A Study of Renormalization Group Effects on the Mass of the Lightest Neutrino	[Slide]	[Video]
	Parallel 8b	Nov. 5, 17:20				
	Isaule	Felipe	Universitat de Barcelona	Functional renormalization for Bose-Bose mixtures	[Slide]	[Video]
	Mathey	Steven	University of Cologne	Activating new universality with the Kibble-Zurek mechanism	[Slide]	[Video]
	Fedorenko	Andrei	Laboratoire de Physique, Ecole Normale Supérieure de Lyon	Depinning transition of charge density waves: mapping onto $O(n)$ symmetric phi^4 theory with $n=-2$ and loop erased random walks	[Slide]	[Video]
	Vilardi	Demetrio	Max Planck Institute for Solid State Research	Antiferromagnetic and superconducting order parameters in the Hubbard model: a dynamical perspective	[Slide]	[Video]

Nov 6 (Fri)	Parallel 9a	Nov. 6, 14:00				
	Nagy	Sandor	Department of Theoretical Physics, University of Debrecen, Hungary	Complex couplings in renormalization	[Slide]	[Video]
	Percacci	Roberto	International School for Advanced Studies, Trieste	Functional renormalization and MSbar	[Slide]	[Video]
	Morris	Tim R	University of Southampton	A perturbative continuum limit for quantum gravity	[Slide]	[Video]
	Saueressig	Frank	Institute for Mathematics, Astrophysics and Particle Physics, Radboud University Nijmegen	Spectroscopy of the Reuter fixed point using the composite operator formalism	[Slide]	[Video]
	Parallel 9b	Nov. 6, 14:20				
	Yabunaka	Shunsuke	Department of Physics, Kyushu University	Why Might the Standard Large N Analysis Fail in the O(N) Model: The Role of Cusps in the Fixed Point Potentials	[Slide]	[Video]
	Sarkar	Sarben	King's College London	Application of asymptotic analysis of the local potential approximation for the functional renormalization group equation to PT symmetric Hamiltonians.	[Slide]	[Video]
	Tetradis	Nikolaos	Department of Physics, University of Athens	Effective theory of large scale structure	[Slide]	[Video]

Poster sessions [Zoom poster, breakout rooms

Nov 3 (Tue)	Poster 1	Nov. 3, 10:40-12:00				
	Tomaz	Anderson Alves	Fluminense Federal University	Hearing the shape of inequivalent spin structures and exotic Dirac operators	[Slide]	
	Chen	Yong-rui	Dalian university of Technology	Phase diagram and critical behavior of quark-meson model	[Slide]	
	Mashiko	Tohru	Department of Physics, Kyushu University	Universality Class around the SU(3) Symmetric Point of the Dimer-Trimer Spin-1 Chain	[Slide]	
	Shimazaki	Takuya	The University of Tokyo	t Hooft anomaly in functional renormalization group	[Slide]	
	Wen	Rui	Dalian University of Technology	Correlations of conserved charges and QCD phase structure	[Slide]	
	Zhang	Yun-Long	Yukawa Institute for Theoretical Physics, Kyoto University	Holographic RG flow and cosmological time evolution	[Slide]	
Nov 4 (Wed)	Poster 2	Nov. 4, 17:20-18:40				
	Koenigstein	Adrian	Institute for Theoretical Physics, Goethe University Frankfurt a. M.	Zero-dimensional QFTs as numerical test cases: FRG-flow equations and numerical fluid dynamics	[Slide]	
	Schuh	Peter	Technische Universität Dortmund	Vacuum Stability and Asymptotic Safety in 2HDMs	[Slide]	
	Steil	Martin Jakob	Technische Universität Darmstadt	Zero-dimensional QFTs as numerical test cases: FRG-flow equations and numerical fluid dynamics	[Slide]	
	Zappala	Dario	Catania	Topological phase transitions in four dimensions	[Slide]	
	Hille	Cornelia	Tuebingen	Quantitative functional renormalization-group description of the two-dimensional Hubbard model	[Slide]	
	Heinzelmann	Sarah	Tuebingen	Entangled magnetic, charge, and superconducting pairing correlations in the 2D Hubbard model: an fRG analysis	[Slide]	
	Busch	Christopher	Justus Liebig University Giessen	The Quark-Meson Transition with Dynamical Hadronization	[Slide]	
	Fejos	Gergely	Eotvos University Budapest	Order of the color superconducting phase transition	[Slide]	
	Niggemann	Nils Frederic	Freie Universität Berlin	The Majorana Functional Renormalization Group for Quantum Spin Systems	[Slide]	
	Wang	Jian	Institute for Mathematics, Astrophysics and Particle Physics, Radboud University Nijmegen	Asymptotically Safe Gravity with Fermions	[Slide]	
	Dutta	Semanti	Institute of Mathematical Sciences, Chennai, India	Wilson action for O(N) theory	[Slide]	
	Horak	Jan	Universitaet Heidelberg	Real-time physics from functional methods with spectral renormalization	[Slide]	

Closing [Zoom main]						
Nov 6 (Fri)	Closing				[Slide]	