

## **Session Program**

**22-27 Sept 2024**



# **12th International Conference on the Exact Renormalization Group 2024 (ERG2024)**

## ***Parallel B***

Maison des Congrès

Chem. des Grandes Isles 7, 1865 Ormont-Dessus Les Diablerets Switzerland

# Monday 23 September

14:30

## Parallel B

Session |

Location: Maison des Congrès, Chem. des Grandes Isles 7, 1865 Ormont-Dessus Les Diablerets Switzerland

14:30-14:50 **Critical geometry approach to phase transitions****Speaker**

Andrea Trombettoni

14:50-15:10 **Conformal constraints and the derivative expansion****Speaker**

Gonzalo De Polsi

15:10-15:30 **Instantons within the Functional renormalization group****Speaker**

Ivan Balog

15:30-15:50 **Probability distribution function of the 2d Ising order parameter****Speaker**

Félix Rose

15:50

## Parallel B

Session |

Location: Maison des Congrès, Chem. des Grandes Isles 7, 1865 Ormont-Dessus Les Diablerets Switzerland

16:20-16:50

**Multiscale Functional Renormalization Group Approach to the 1D Extended Hubbard Model****Speaker**

David K. Campbell

16:50-17:20 **Quantum critical Dirac semimetals and finite-temperature effects****Speaker**

Mireia Tolosa Simeon

17:20-17:40

**New universality class describes Vicsek's flocking phase in physical dimensions****Speaker**

Patrick Jentsch

17:40-18:00

**Optimization and Stabilization of Functional Renormalization Group Flows****Speaker**

Niklas Zorbach

18:00

## Tuesday 24 September

16:40

### Parallel B

Session |

Location: Maison des Congrès, Chem. des Grandes Isles 7, 1865 Ormont-Dessus Les Diablerets Switzerland

16:40-17:10

#### **Local 2PI vertex approximation: Nanoflakes, ferromagnets, and SU(2) gauge theory for antiferromagnets**

**Speaker**

Andrey Katanin

17:10-17:40

#### **The zoo of states in the 2D Hubbard model**

**Speaker**

Robin Scholle

17:40-18:00

#### **Full potential approach to frustrated antiferromagnets**

**Speaker**

Shunsuke Yabunaka

18:00

# Wednesday 25 September

14:30

## Parallel B

Session |

**Location:** Maison des Congrès, Chem. des Grandes Isles 7, 1865 Ormont-Dessus Les Diablerets Switzerland

**14:30-14:50 Bosonization for fermionic fRG at weak and strong couplings**

**Speaker**

Kilian Fraboulet

**14:50-15:10 Single-boson exchange formulation of the Schwinger-Dyson equation and its application to the fRG**

**Speaker**

Miriam Patricolo

**15:10-15:30 The role of quenched disorder in polymerized membranes**

**Speaker**

Dominique Mouhanna

**15:30-15:50 Generalized Hertz action for quantum criticality in Fermi systems**

**Speaker**

Pawel Jakubczyk

15:50

16:20

## Parallel B

Session |

**Location:** Maison des Congrès, Chem. des Grandes Isles 7, 1865 Ormont-Dessus Les Diablerets Switzerland

**16:20-16:50 Secondary instabilities of 2D altermagnets**

**Speaker**

Nikolaos Parthenios

**16:50-17:20 Accurate estimates of universal quantities: Monte Carlo simulations of improved lattice models and finite size scaling**

**Speaker**

Martin Hasenbusch

**17:20-17:40 Phase diagram of the J1-J2 quantum Heisenberg model for arbitrary spin**

**Speaker**

Andreas Rückriegel

**17:40-18:00 The inviscid fixed point of the multi-dimensional Burgers-KPZ equation**

**Speaker**

Liubov Gosteva

18:00

# Thursday 26 September

14:30

## Parallel B

Session |

Location: Maison des Congrès, Chem. des Grandes Isles 7, 1865 Ormont-Dessus Les Diablerets Switzerland

14:30-14:50

**Recursive algorithm for generating high-temperature expansions for spin systems and the chiral non-linear susceptibility**

**Speaker**

Peter Kopietz

14:50-15:10

**Quantum effects on unconventional pinch-point singularities from pseudo-fermion functional renormalization**

**Speaker**

Lasse Gresista

15:10-15:30

**Real-frequency quantum field theory applied to the single-impurity Anderson model**

**Speaker**

Nepomuk Ritz

15:30-15:50

**divERGe - an open source functional renormalization code for material calculations**

**Speaker**

Jonas Profe

15:50