## Workshop of the Potsdam-Kyiv Research Group Linkage
# Singular diffusions: analytic and stochastic approaches, I

### Universität Potsdam, Neues Palais, Haus 9 Raum 1.14

| Monday, April 1 2019 | Tuesday, April 2 2019 | Wednesday, April 3 2019 |
|---|---|---|
| 09.15 – 09.30 *Opening* | 09.15 – 10.10 **Sylvie Roelly** (Potsdam) *Gibbsian theory as framework for the study of interacting diffusions* | 09.15 – 09.55 **Iryna Bodnarchuk** (Kyiv) *Wave equation driven by general stochastic measure* |
| 09.30 – 10.25 **Alexandra Antoniouk** (Kyiv) *Multidim. pseudo-dif. equation with spatial p-adic variables and corresponding stochastic processes* | 10.15 – 10.55 **Alexander Zass** (Potsdam) *Entropy method for Gibbs point processes* | 10.00 – 10.55 **Tania Kosenkova** (Potsdam) *Noise sensitivity of Lévy driven SDE's: estimates and applications* |
| *Coffee break* (Raum 2.16) | *Coffee break* (Raum 2.16) | *Coffee break* (Raum 2.16) |
| 10.50 –11.45 **Ilya Pavlyukevich** (Jena) *On the "heterogeneous diffusion process"* | 11.20 – 12.15 **Alexei Rebenko** (Kyiv) *Correlation of clusters: partially truncated correlation functions and their decay* | |
| 11.50--12.30 **Krzysztof Bogdan** (Wroclaw) *Semilinear Dirichlet problem for the fractional Laplacian* | | |
| *Lunch break* | *Lunch break* | |
| 14.00 – 14.55 **Jean-François Jabir** (Moscow) *Langevin dynamics with boundary conditions* | 14.00 – 14.40 **Pierre Houdebert** (Potsdam) *Uniqueness and decay of correlation for Gibbs point processes, using disagreement percolation* | |
| 15.00 – 15.55 **Alexei Kulik** (Wroclaw) *Approximation in law of Markov processes by non-linear regressions: analytic background and stochastic applications* | 14.45 – 15.40 **Andrey Pilipenko** (Kyiv) *Functional limit theorems for perturbed random walks* | |
| | *Coffee break* (Raum 2.16) | |
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| 16.25 – 17.05 **Semen Bodnarchuk** (Kyiv) *Modified Euler scheme for weak approximation of SDEs driven by Wiener process* | 16.05 – 16.35 **Oleksandr Prykhodko** (Kyiv) *Limit behaviour of random walks with elastic screens* | |
| 17.10 – 17.50 **Dmytro Ivanenko** (Kyiv) *Statistical research of models generated by discretely observed solution to SDE's* | 16.40 – 17.20 **Olga Aryasova** (Kyiv) *On exponential convergence of a distance between solutions of an SDE with discontinuous drift* | |
| 18.00 – 21.00 *Concert* **Sophie Catherin** *Reception* (Haus 12 a, 1st floor) | | |