

# Statistics and Probability

September 24th (Tue)

## 9:30–12:00

- 1 Kiyotaka Suzaki (Osaka Univ.)<sup>#</sup> Construction of leafwise non-degenerate diffusion processes on foliated spaces via SDE approach and its application ..... 15
- 2 Takafumi Amaba (Ritsumeikan Univ.)<sup>#</sup> On the monotonicity of  $\mathcal{L}_0$ -cost along backward heat flow ..... 15  
Kazumasa Kuwada (Ochanomizu Univ.)
- 3 Jirô Akahori (Ritsumeikan Univ.)<sup>#</sup> A discrete-time Clark–Ocone formula and its application to an error analysis ..... 15  
Takafumi Amaba (Ritsumeikan Univ.)  
Kaori Okuma (Ritsumeikan Univ.)
- 4 Masafumi Hayashi (Univ. of Ryukyus/JST CREST)<sup>#</sup> Hölder continuity property of the densities of SDEs with singular drift coefficients ..... 10  
Arturo Kohatsu Higa (Ritsumeikan Univ./JST CREST)  
Go Yuki (Ritsumeikan Univ./JST CREST)
- 5 Hideki Tanemura (Chiba Univ.)<sup>#</sup> Complex Brownian motion representations of non-colliding diffusion processes ..... 10  
Makoto Katori (Chuo Univ.)
- 6 Hideki Tanemura (Chiba Univ.)<sup>#</sup> Strong Markov property of determinantal processes ..... 10
- 7 Nobuaki Naganuma (Tohoku Univ.)<sup>#</sup> Asymptotic error distributions of the Crank–Nicholson scheme for SDEs driven by fractional Brownian motion ..... 15
- 8 Shigeyoshi Ogawa (Ritsumeikan Univ.)<sup>\*</sup> Identification of a noncausal Itô process from the stochastic Fourier coefficients ..... 15  
Hideaki Uemura (Aichi Univ. of Edu.)
- 9 Naoyuki Ichihara (Hiroshima Univ.)<sup>\*</sup> The generalized principal eigenvalue for ergodic type HJB equations ..... 15

## 14:15–14:45

- 10 Naoki Kubota (Nihon Univ.)<sup>#</sup> Rates of convergence in first passage percolation with a weaker condition than exponential tail assumptions ..... 15
- 11 Yuji Hibino (Saga Univ.)<sup>#</sup> Asymptotic spectral distributions of distance- $k$  graphs of direct product graphs ..... 15

## 15:00–16:00 Talk invited by Statistics and Probability Section

Makoto Nakashima (Univ. of Tsukuba)<sup>#</sup> Branching random walks in random environment

## 16:15–17:15 Talk invited by Statistics and Probability Section

Katusi Fukuyama (Kobe Univ.)<sup>#</sup> Uniform distribution theory for geometric progressions

September 25th (Wed)

## 9:15–11:50

- 12 Hiroki Takahashi (Keio Univ.)<sup>\*</sup> Prevalence of non-uniform hyperbolicity at the first bifurcation of the Hénon family ..... 20

13	Takuya Ikeda (Osaka Univ.)* Takehiko Morita (Osaka Univ.)	Central limit theorem for a class of nonsingular transformations with quasi-compact Perron–Frobenius operator . . . . .	15
14	Makoto Mori (Nihon Univ.)#	On the essential spectrum of Perron–Frobenius operator . . . . .	20
15	Naotaka Kajino (Kobe Univ.)#	(Non-)periodic asymptotic behavior of the heat kernel on Sierpiński carpets . . . . .	20
16	Yukio Kasahara (Hokkaido Univ.)# Akihiko Inoue (Hiroshima Univ.) Mohsen Pourahmadi (Texas A&M Univ)	Matrix-valued rigid functions, kernels of Toeplitz operators and CND processes . . . . .	15
17	Shunsuke Ihara (Nagoya Univ.)*#	Asymptotic behavior of error probabilities in information transmission over white Gaussian channel with feedback . . . . .	15
18	Takaaki Shimura (Inst. of Stat. Math.)#	A numerical characteristic of extreme values . . . . .	15
19	Satoshi Suzuki (Shimane Univ.)# Daishi Kuroiwa (Shimane Univ.)	Surrogate duality for quasiconvex programming with data uncertainty . . . . .	15

**11:50–12:20 Research Section Assembly**

September 26th (Thu)

**9:00–12:00**

20	Takayuki Fujii (Shiga Univ.)#	Nonparametric estimation for jump Markov processes . . . . .	15
21	Koji Tsukuda (Grad. Univ. for Adv. Stud.) Yoichi Nishiyama (Inst. of Stat. Math./Grad. Univ. for Adv. Stud.)	Z-process methods in $\ell^\infty$ - and $L_2$ -spaces for change point problems . . . . .	20
22	Teppei Ogihara (Osaka Univ.)#	Local asymptotic mixed normality property for nonsynchronously observed diffusion processes . . . . .	20
23	Ayaka Yagi (Tokyo Univ. of Sci.)# Takashi Seo (Tokyo Univ. of Sci.)	Tests for mean vector and simultaneous confidence intervals with three-step monotone missing data . . . . .	15
24	Masashi Hyodo (Tokyo Univ. of Sci.)# Takahiro Nishiyama (Senshu Univ.) Takashi Seo (Tokyo Univ. of Sci.)	On the new test statistic based on linear combination of Dempster statistics and $T^2$ statistics . . . . .	15
25	Hiroki Watanabe (Tokyo Univ. of Sci.)# Hyodo Masashi (Tokyo Univ. of Sci.) Seo Takashi (Tokyo Univ. of Sci.)	A determination of cut-off point for Euclidean distance discriminant rule in high-dimensional data . . . . .	15
26	Aki Ishii (Univ. of Tsukuba)# Kazuyoshi Yata (Univ. of Tsukuba) Makoto Aoshima (Univ. of Tsukuba)	On the distribution of the largest eigenvalue via geometric representation in high-dimension, low sample size context . . . . .	15
27	Kazuyoshi Yata (Univ. of Tsukuba)# Makoto Aoshima (Univ. of Tsukuba)	Asymptotic normality for inference on high-dimensional mean vectors under mild conditions . . . . .	15
28	Fumiya Akashi (Waseda Univ.)#	An empirical likelihood approach toward discriminant analysis for non-Gaussian vector stationary processes . . . . .	15
29	Yan Liu (Waseda Univ.)#	A new way to estimate tail index . . . . .	15

**12:10–12:30 Presentation Ceremony for 2013 Analysis Prize****14:30–15:30 Talk invited by Statistics and Probability Section**

Yoichi Nishiyama (Inst. of Stat. Math.)<sup>#</sup> A stochastic maximal inequality, weak convergence of infinite-dimensional martingales, and semiparametric statistics

**15:45–16:45 Talk invited by Statistics and Probability Section**

Kouji Yamamoto (Osaka Univ.)<sup>#</sup> Modelling for square contingency tables and its application

## September 27th (Fri)

**9:15–12:00**

- 30 Kentaro Tanaka (Tokyo Tech)<sup>#</sup> Algebraic methods for conditional independence inference ..... 15
- 31 Yoshihide Kakizawa (Hokkaido Univ.)<sup>#</sup> Third-order average local powers of Bartlett-type adjusted tests: Ordinary versus adjusted profile likelihood ..... 15
- 32 Yoshihiko Maesono (Kyushu Univ.)<sup>#</sup> Smoothing of the Wilcoxon's signed rank test ..... 10
- 33 Yusuke Saigusa (Tokyo Univ. of Sci.)<sup>#</sup> Decomposition of symmetry using extended palindromic symmetry  
Kouji Tahata (Tokyo Univ. of Sci.) models for square contingency tables ..... 10  
Sadao Tomizawa (Tokyo Univ. of Sci.)
- 34 Masanori Sawa (Nagoya Univ.)<sup>#</sup> A lemma on the eigenvalues of Hermitian matrices and its application  
2 —Proof of Fisher's inequality ..... 15
- 35 Masatake Hirao<sup>#</sup> Constructions of optimal rotatable designs on the  $n$ -ball ..... 15  
(Tokyo Woman's Christian Univ.)  
Masanori Sawa (Nagoya Univ.)  
Masakazu Jimbo (Nagoya Univ.)
- 36 Sanpei Kageyama<sup>\*</sup> An affine  $\alpha$ -resolvable symmetric triangular design does not exist for  
(Hiroshima Inst. of Tech.) any  $\alpha$  ..... 10
- 37 Sanpei Kageyama Some existence of additive cyclic BIB designs ..... 15  
(Hiroshima Inst. of Tech.)  
Kazuki Matsubara (Hiroshima Univ.)
- 38 Takeshi Torii (Osaka Pref. Univ.)<sup>\*</sup> A nested row-column design with split units constructed by a regular  
Shinji Kuriki (Osaka Pref. Univ.) generalized Youden design ..... 10
- 39 Hiromu Yumiba (Int. Inst. for Nat. Sci.)<sup>#</sup> Existence conditions for balanced fractional factorial designs of resolu-  
Yoshifumi Hyodo tion  $V$  derived from three-symbol simple arrays (III) ..... 15  
(Okayama Univ. of Sci./Int. Inst. for Nat. Sci.)  
Masahide Kuwada  
(Int. Inst. for Nat. Sci.)
- 40 Yiling Lin (Nagoya Univ.)<sup>#</sup> Optimal equi-difference conflict-avoiding codes of odd length and weight  
Miwako Mishima (Gifu Univ.) three ..... 18  
Junya Satoh (Nagoya Univ.)  
Masakazu Jimbo (Nagoya Univ.)