

# List of talks

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Notes: [EN] indicates a talk delivered in English, [JP] in Japanese; “invited” denotes invited talks.

## 2025

- [EN] Optimal rank estimators for possibly infinite variance autoregressive models (Frontiers in Directional Statistics Theory, Methods, and Applications at Hosei University)
- [EN, invited] Robust LD-based EL estimator for low-rank vector autoregressive models (UC International Data Science Workshop at University of Canberra)
- [EN, invited] Sparse empirical likelihood estimation for Low-rank VAR models (EcoSta 2025 (Organized Session EO134 by Erricos Kontoghiorghes, Ana Colubi) at Waseda University)
- [EN, invited] Convergence of plug-in statistics in spatial median regression and application to sparse empirical likelihood estimation (Shimoda Statistical Seminar, Advances in Quantum Statistics and Time Series Analysis at Shimoda Tokyu Hotel)

## 2024

- [EN] On weighted plug-in statistics in spatial median regression (International Workshop, Innovations in Statistical Modeling and Inference: Applications Across Various Manifolds at Hosei University)
- [JP] 低ランク VAR モデルに対する頑健な経験尤度推定 (2024 年度統計関連学会連合大会 at 東京理科大学)
- [JP] Robust inference for non-stationary heavy-tailed processes via self-weighting and resampling method (Advances in Statistical Modeling and Inference: Exploring Applications on Diverse Manifolds (supported by Japan Statistics Research Institute) at Hosei University. Joint work with Konstantinos Fokianos and Junichi Hirukawa)

## 2023

- [EN] Robust reduced rank estimation for low-rank vector AR models (TMU International Conference on Statistical Modelling and Inference at Tokyo Metropolitan University (Marunouchi Satellite Campus, Room A))
- [JP] 空間中央値に基づく低ランク VAR モデルの推定 (日本数学会 2023 年度秋季総合分科会 at 東北大学)

- [JP, invited] 非正則時系列モデルの頑健推測理論とその拡張 (2023 年度統計関連学会連合大会 (第 37 回日本統計学会小川研究奨励賞 受賞講演) at 京都大学)
- [EN, invited] Robust reduced rank estimation for low-rank vector AR models (EcoSta 2023 (Organized Session EO076 by Zudi Lu) at Waseda University)
- [JP, invited] Spatial-median based self-weighted GEL and robust low-rank regression for VAR models (信州大学スタッフセミナー at 信州大学)

## 2022

- [JP] Least distance estimation for low-rank VAR models (Waseda mini-workshop “ Recent development on time series analysis and related topics ” at Waseda University)
- [JP, invited] 空間中央値・一般化経験尤度に基づく VAR モデルの頑健な推測理論 (九州大学 統計セミナー at 九州大学)
- [JP] 多変量自己回帰モデルに対する一般化経験尤度法を用いた頑健な推測理論の構成 (日本数学会 2022 年度秋季総合分科会 at 北海道大学)
- [EN, invited] Weighted estimation procedures for time-varying heavy-tailed processes (EcoSta 2022 (Organized Session EO271 by Zudi Lu) at Ryukoku University. Joint work with Konstantinos Fokianos and Junichi Hirukawa)
- [EN, invited] Spatial median and self-weighted approach for multivariate heavy-tailed processes (Mathematics and Statistics Seminar Series at University of Bergamo (Online seminar, joined from Japan))
- [JP] GEL confidence regions for nonstationary heavy-tailed processes (Otsu Seminar “Recent Developments in Time Series and Related Topics” In honor of Professor Masanobu Taniguchi on the occasion of his retirement at Biwako Hotel)
- [EN, invited] Self-weighted GEL method based on spatial median (Waseda international symposium on “Topological Data Science, Causality, Analysis of Variance, & Time Series”, dedicated to Professor Taniguchi’s retirement at Waseda University)

## 2021

- [JP] 裾の重い時変自己回帰モデルに対する頑健な推測手法について (第三回 日本統計研究所研究集会 (様々な多様体上の統計学) at 法政大学)
- [JP] Self-weighted estimator for heavy tailed time varying processes (2021 年度統計関連学会連合大会 at オンライン. Joint work with Konstantinos Fokianos and Junichi Hirukawa)
- [EN] Statistical inference for nonstationary heavy-tailed time series models by L1 approach (Innovative development of theory and methodology on statistical science in various fields at Niigata University (Online). Joint work with Konstantinos Fokianos and Junichi Hirukawa)
- [EN, invited] Robust regression methods in heavy-tailed processes and spherical predictors (Waseda Cherry Blossom Workshop on Topological Data Science at Waseda University)

## 2020

- [JP] Robust regression on hyper-spheres with unspecified heteroscedastic errors (日本数学会 2020 年度年会 at 日本大学)
- [JP] Inference for heavy-tailed time varying processes by self-weighting (日本数学会 2020 年度年会 at 日本大学. Joint work with Konstantinos Fokianos and Junichi Hirukawa)
- [EN, invited] Robust regression on hyper-spheres with unspecified heteroscedastic errors and smooth approximation of object functions (Mini Waseda International Symposium at Waseda University)

## 2019

- [EN, invited] Self-weighted GEL method for heavy-tailed ARMA models and its applications to various problems (CMStatistics 2019 (Organized Session CO380 by Ilia Negri) at University of London)
- [JP, invited] Robust local linear inference for heavy-tailed non-regular processes (SWET: Summer Workshop on Economic Theory 2019 at 小樽経済センター)
- [EN, invited] Robust causality test of infinite variance processes (EcoSta 2019 (Organized Session EO123 by myself) at National Chung Hsing University)
- [EN, invited] Hybrid GEL test for rotational symmetry on spheres (Workshop on causal inference in complex marine ecosystems at Institute of Marine Research, Norway)
- [EN, invited] Robust causality test of infinite variance processes (Statistical Methods and Models for Complex Data at University of Sannio. Joint work with Masanobu Taniguchi and Anna Clara Monti)
- [EN, invited] Nonparametric L1 regression for spherical data with heavy-tailed dependent errors (Statistics Seminar at Lancaster University)
- [EN, invited] Robust local linear inference for spherical-linear regression models (Mini Workshop on TDA, Time Series and Statistics at Waseda University)
- [JP] 従属構造を持つシリンダー上のデータに対する非母数的・頑健な局所多項式回帰 (日本数学会 2019 年度年会 at 東京工業大学)
- [EN, invited] Hybrid GEL test for rotational symmetry on spheres (Kinosaki Seminar "Data Science and Causality" at Blue Ridge Hotel)
- [EN, invited] Robust causality test of infinite variance processes (Waseda International Symposium "Introduction of General Causality to Various Data and its Applications" at Waseda University. Joint work with Masanobu Taniguchi and Anna Clara Monti)

## 2018

- [EN] GEL method for tests of rotational symmetry on spheres (Various studies of statistical analysis for asymptotic theory, circular or time series at Nanzan University)
- [EN] Robust local polynomial regression for circular regression models with heavy-tailed error (Waseda International Symposium "Introduction of General Causality to Various Data and its Innovation of the Optimal Inference" at Waseda University)

- [JP, invited] Robust statistical inference for nonstandard time series models and related topics (Quantitative Finance Seminar at Tokyo Metropolitan University)
- [JP] 一般化経験尤度法による球面上分布の回転対称性の検定 (日本数学会 2018 年度秋季総合分科会 at 岡山大学)
- [JP] Robust change point detection by self-weighted GEL method (2018 年度統計関連学会連合大会 at 中央大学)
- [JP] Robust statistical inference for multiple time series: Self-weighting and normalization methods (Mathematical Statistics and stochastic analysis for modeling and analysis of complex random systems at Osaka University)
- [JP] Robust statistical inference for multiple time series: Self-weighting and normalization methods (SWET: Summer Workshop on Economic Theory at Otaru University of Commerce)
- [EN, invited] Robust statistical inference for time series regression model by self-normalized subsampling method (EcoSta 2018 (Organized Session EO042 by Kaiji Motegi) at City University of Hong Kong)
- [JP] 高次元時系列における Whittle 推定量の漸近理論とその数値例 (日本数学会 2018 年度年会 at 東京大学. Joint work with Yoshiyuki Tanida and Masanobu Taniguchi. Speaker: Tanida, Y.)
- [JP] 自己加重型 GEL 統計量の局所検出力及び加重関数選択手法 (日本数学会 2018 年度年会 at 東京大学)
- [EN, invited] Asymptotic theory and numerical studies of Whittle estimation for high-dimensional time series (Kochi International Seminar on "Recent Developments of Quantile Method, Causality and High Dim. Statistics" at Kochi University. Joint work with Yoshiyuki Tanida and Masanobu Taniguchi. Speaker: Tanida, Y.)
- [EN, invited] Local asymptotic power of self-weighted GEL method and choice of weighting function (Kochi International Seminar on "Recent Developments of Quantile Method, Causality and High Dim. Statistics" at Kochi University)
- [EN, invited] Robust GEL test in infinite variance processes and its application to change point tests (Kagawa International Symposium "Recent Developments in Statistics and Econometrics" at Kagawa University)
- [EN, invited] Self-normalized subsampling method for time series regression models with heavy-tailed long-memory noise (Waseda International Symposium on "Recent Developments in Time series Analysis: Quantile Regression, High Dimensional Data and Causality" at Waseda University. Joint work with Shuyang Bai and Murad Taqqu)
- [EN, invited] Robust statistical inference for non-standard time series models by empirical likelihood, self-weighting and self-normalization (Departmental Colloquia at Texas A&M University)

## 2017

- [JP, invited] 非正則時系列モデルに対する頑健な統計的推測手法の構成 (第 15 回早稲田大学数学・応用数理談話会 at 早稲田大学)

- [JP, invited] 無限分散・長期記憶過程に対する頑健な推測手法の構成 (広島大学 金曜統計セミナー at 広島大学)
- [EN, invited] Robust confidence region for time series regression models under the presence of infinite variance and long-memory (Kyoto (Fushimi-Uji) International Seminar on "Recent Developments for Statistical Science" at 京都テルサ. Joint work with Shuyang Bai and Murad Taqqu)
- [EN, invited] Self-weighted GEL method for linear hypothesis in infinite variance processes and its application to change point tests (Waseda International Symposium on "Recent Developments for Statistical Asymptotic Theory for Time Series and Circular Distributions" at Waseda University)
- [JP, invited] 経験尤度法・基準化法に基づく非正則時系列モデルの頑健な統計的推測法の構成 (特別講演 (VIII: 統計分科会) 日本数学会 2017 年度秋季総合分科会 at 山形大学)
- [EN] Self-normalized subsampling method for non-standard time series regression models (2017 年度統計関連学会連合大会 at 南山大学)
- [EN, invited] Robust GEL method for linear hypothesis of infinite variance processes (EcoSta 2017 (Organized Session EO094 by Kaiji Motegi) at The Hong Kong University of Science and Technology)
- [EN, invited] Change point detection by self-weighted empirical likelihood method and its application to real data (A Symposium on Complex Data Analysis at National Tsing Hua University)
- [JP] Self-normalized and random weighting approach to likelihood ratio test for the model diagnostics of stable processes (日本数学会 2017 年度年会 at 首都大学東京)
- [JP] Quantile regression-based self-normalized block sampling method for linear regression model with dependent errors (日本数学会 2017 年度年会 at 首都大学東京. Joint work with Shuyang Bai and Murad Taqqu)
- [EN, invited] Robust GEL test for linear hypothesis of infinite variance time series models (Ise-Shima Seminar "High Dimensional Statistical Analysis for Time Spatial Processes and Quantile Analysis for Time Series" at Ise-Shima Royal Hotel)
- [EN, invited] Empirical likelihood approach for robust change point detection of infinite variance time series models (Keio International Symposium on "Statistical Analysis for High-Dimensional, Circular or Time Series Data" at Keio University. Joint work with Holger Dette and Yan Liu)
- [EN, invited] A self-normalized block sampling method to quantile regression on time series (Waseda International Symposium on "High Dimensional Statistical Analysis for Time Spatial Processes and Quantile Analysis for Time Series" at Waseda University. Joint work with Shuyang Bai and Murad Taqqu)

## 2016

- [EN, invited] Self-normalized and random weighting approach to likelihood ratio test for the model diagnostics of stable processes (Hokkaido International Symposium on "Recent Developments of Statistical Theory in Statistical Science" at Hokkaido University)

- [EN, invited] Quantile regression based self-normalized block sampling method for linear regression model with dependent errors (Waseda International Symposium on "High Dimensional Statistical Analysis for Time Spatial Processes and Quantile Analysis for Time Series" at Waseda University. Joint work with Shuyang Bai and Murad Taqqu)
- [JP] 非正則モデルに対する L1-経験尤度比検定の構成 (日本数学会 2016 年度秋季総合分科会 at 関西大学)
- [JP] 自己加重型経験尤度による無限分散時系列モデルに対する頑健な統計手法の構成 (2016 年度統計関連学会連合大会 at 金沢大学)
- [EN] Empirical likelihood and self-weighting approach for hypothesis testing of infinite variance processes and its applications (Boston University/Keio University Workshop 2016 at Boston University)
- [JP] 自己加重経験尤度による安定 ARMA 過程のパラメータ検定 (日本数学会 2016 年度年会 at 筑波大学)
- [JP] LAD-based empirical likelihood method for linear hypothesis and its local asymptotic power (日本数学会 2016 年度年会 at 筑波大学)
- [EN, invited] Self-weighted empirical likelihood approach for infinite variance processes (Kumamoto International Symposium on "High Dimensional Statistical Analysis and Quantile Analysis for Time Series" at Kumamoto University)
- [EN, invited] LAD-based empirical likelihood method and its local asymptotic power (Waseda International Symposium on "High Dimensional Statistical Analysis for Time Spatial Processes and Quantile Analysis for Time Series" at Waseda University)

## 2015

- [EN, invited] Frequency domain self-weighted empirical likelihood for stable processes (Hakone Seminar at Hotel Green Plaza Hakone)
- [EN, invited] Self-weighted empirical likelihood for heavy-tailed autoregressive processes (Waseda International Symposium on "High Dimensional Statistical Analysis for Time-Spatio Temporal Processes and Quantile Analysis for Time Series" at Waseda University)
- [JP] GMM 推定量による安定過程のパラメータ推定及びその 2 次漸近理論 (日本数学会 2015 年度年会 at 明治大学)
- [EN, invited] Higher-order asymptotic properties of generalized empirical likelihood estimator for alpha-stable processes (Waseda International Symposium on "Asymptotic Sufficiency, Asymptotic Efficiency and Semimartingale" at Waseda University)
- [EN] Higher-order asymptotic properties of generalized empirical likelihood estimator for alpha-stable processes (Seminar talk at Technical University of Munich)

## 2014

- [JP] Frequency domain GMM estimators for stable processes and its asymptotic optimality (Kaken Symposium at Niigata University)
- [JP] On the second-order asymptotic efficiency of frequency domain GMM estimators (日本数学会 2014 年度秋季総合分科会 at 広島大学)

- [JP] Higher-order asymptotic properties of frequency domain GMM estimators (Kaken Symposium at Nara University of Education)
- [EN] Nonparametric LAN approach for frequency domain GMM-type hypothesis testing (Waseda International Symposium on "High Dimensional Statistical Analysis and Related Topics" at Waseda University)
- [JP] LAN and frequency domain GMM approach to optimality of hypothesis testing (日本数学会 2014 年度年会 at 学習院大学)
- [EN] Empirical likelihood ratio for symmetric alpha-stable processes (Waseda International Symposium on "Stable Process, Semimartingale, Finance and Pension Mathematics" at Waseda University. Joint work with Yan Liu and Masanobu Taniguchi)

## 2013

- [JP] An empirical likelihood approach toward discriminant analysis for non-Gaussian vector stationary processes (日本数学会 2013 年度秋季総合分科会 at 愛媛大学)
- [JP] An empirical likelihood approach toward discriminant analysis for non-Gaussian vector stationary processes (KAKENHI Symposium on "Recent Advances in Statistical Theory and Applications for High Dimensional Data Analysis and Related Topics" at Otaru University of Commerce)
- [JP] Empirical likelihood approach for symmetric alpha-stable linear processes (日本数学会 2013 年度年会 at 京都大学. Joint work with Masanobu Taniguchi)