

PROGRAMME PSD 2014

WEDNESDAY, 17 SEPTEMBER

- 8:30 - Registration
- 9:30 - Opening Session

Synthetic Data I

Session Chair: Jörg Drechsler

- 9:45 - Disclosure Risk Evaluation for Fully Synthetic Categorical Data. *Jingchen Hu, Jerome Reiter and Quanli Wang*
- 10:10 - ν -Dispersed Synthetic Data Based on a Mixture Model with Constraints. *Anna Oganian*
- 10:35 - Nonparametric Generation of Synthetic Data for Small Geographic Areas. *Joseph W. Sakshaug and Trivellore E. Raghunathan*
- 11:00 – Using Partially Synthetic Data to Replace Suppression in the Business Dynamics Statistics: Early Results. *Javier Miranda and Lars Vilhuber*

11:25 - Coffee Break

Synthetic Data II

Session Chair: Jordi Castro

- 11:50 - Synthetic Longitudinal Business Databases for International Comparisons. *Jörg Drechsler and Lars Vilhuber*
- 12:15 - Simple methods for providing synthetic data for the UK longitudinal studies. *Gillian M. Raab, Beata Nowok and Chris Dibben (*)*
- 12:30 - Methods and Tools for the Generation of Synthetic Populations. A Brief Review. *Matthias Templ and Bernhard Meindl (*)*

12:45 - Lunch

Microdata Masking

Session Chair: Aleksandra Slavkovic

- 14:40 - Density Approximant Based on Noise Multiplied Data. *Yan-Xia Lin*
- 15:05 - Reverse Mapping to Preserve the Marginal Distributions of Attributes in Masked Microdata. *Krishnamurty Muralidhar, Rathindra Sarathy and Josep Domingo-Ferrer*
- 15:30 - JPEG-based Microdata Protection. *Javier Jiménez, Guillermo Navarro-Arribas and Vicenç Torra*
- 15:45 – Ontology-Based Quality Evaluation of Value Generalization Hierarchies for Data Anonymization. *Vanessa Ayala-Rivera, Patrick McDonagh, Thomas Cerqueus and Liam Murphy (*)*
- 16:00 - Data Swapping as a More Efficient Tool to Create Anonymized Census Microdata in Japan. *Shinsuke Ito (*)*

16:15 - Coffee Break

Record Linkage

Session Chair: Vicenç Torra

- 16:35 - A Comparison of Blocking Methods for Record Linkage. *Rebecca C. Steorts, Samuel L. Ventura, Mauricio Sadinle and Stephen E. Fienberg*
- 17:00 - Probabilistic Record Linkage for Disclosure Risk Assessment. *Natalie Shlomo*
- 17:25 - Hierarchical Linkage Clustering with Distributions of Distances for Large-Scale Record Linkage. *Samuel L. Ventura and Rebecca Nugent*
- 17:50 - Disclosure risks in longitudinally linked data and potential approaches for protection. *Robin Mitra, Stephanie Blanchard, Caroline Tudor and Keith Spicer (*)*

THURSDAY, 18 SEPTEMBER

Protection Using Privacy Models

Session Chair: Kris Muralidhar

- 9:00 - Improving the Utility of Differential Privacy via Univariate Microaggregation. *David Sánchez, Josep Domingo-Ferrer and Sergio Martínez*
- 9:25 - Differentially Private Exponential Random Graphs. *Vishesh Karwa, Aleksandra Slavkovic and Pavel Krivitsky*
- 9:50 - k^m -Anonymity for Continuous Data Using Dynamic Hierarchies. *Olga Gkountouna, Sotiris Angeli, Athanasios Zigomitos, Manolis Terrovitis and Yannis Vassiliou*
- 10:15 – Differentially-Private Logistic Regression for Detecting Multiple-SNP Association in GWAS Databases. *Fei Yu, Michal Rybar, Caroline Uhler and Stephen E. Fienberg*

10:40 - Coffee Break

Privacy-Preserving Protocols

Session Chair: Juan José Salazar

- 11:00 – Towards Secure and Practical Location Privacy through Private Equality Testing. *Emmanouil Magkos, Panayiotis Kotzanikolaou, Marios Magioliditis, Spyros Sioutas and Vassilios S. Verykios*

Remote Access

Session Chair: Peter Paul de Wolf

- 11:25 – Comparison of Two Remote Access Systems Recently Developed and Implemented in Australia. *Christine O'Keefe, Phillip Gould and Tim Churches*

Case Studies and Software I

Session Chair: Christine O'Keefe

- 11:50 - Controlled Shuffling, Statistical Confidentiality and Microdata Utility: a Successful Experiment with a 10% Household Sample of the 2011 Population Census of Ireland for the IPUMS-International Database. *Robert McCaa, Krish Muralidhar, Rathindra Sarathy, Michael Comerford and Albert Esteve-Palos.*
- 12:15 - Balancing Confidentiality and Usability: Protecting Sensitive Data in the Case of Inward Foreign Affiliates Statistics (FATS). *Katri Soininvaara, Teemu Oinonen, Annu Nissinen*
- 12:40 - Scenario Analysis of Privacy Attacks either on or using Genomic Data. *Sahel Shariati Samani, Mark Elliot and Andrew Brass (*)*

12:55 - Lunch

Case Studies and Software II

Session Chair: Natalie Shlomo

- 15:00 - Applicability of Confidentiality Methods to Personal and Business Data. *Christine O'Keefe and Natalie Shlomo*
- 15:25 - A French Anonymization Experiment with Health Data. *Maxime Bergeat, Nora Cuppens-Boulahia, Frédéric Cuppens, Noémie Jess, Saïd Oulmakhzoune, Françoise Dupont, Gaël de Peretti (*)*
- 15:40 - EUL to OGD: A Simulated Attack on Two Social Survey Datasets. *Mark Elliot, Elaine Mackey, Susan O'Shea, Caroline Tudor, Keith Spicer (*)*
- 15:55 - DDI Data Description Statistics Protection Software. *Sebastian Kočar (*)*
- 16:10 - Announcement: "Co-Utility" project.

16:15 - Coffee Break

16:45 - Guided visit to Eivissa

20:00 - Gala Dinner

FRIDAY, 19 SEPTEMBER

Tabular Data Protection I

Session Chair: Sarah Giessing

- 9:00 – Enabling Statistical Analysis of Suppressed Tabular Data. *Lawrence H. Cox*
- 9:25 - Assessing the Information Loss of Controlled Adjustment Methods in Two-Way Tables. *Jordi Castro and José A. González*
- 9:50 - Further Developments with Perturbation Techniques to Protect Tabular Data. *María Salomé Hernández-García and Juan José Salazar-González*
- 10:15 – Comparison of Different Sensitivity Rules for Tabular Data and Presenting a New Rule -- the Interval Rule. *Johan Bring and Qun Wang*

10:40 - Coffee Break

Tabular Data Protection II

Session Chair: Larry Cox

- 11:00 - Pre-tabular Perturbation with Controlled Tabular Adjustment: Some Considerations. Sarah Giessing
- 11:25 – Measuring Disclosure Risk with Entropy in Population Based Frequency Tables. *Laszlo Antal, Natalie Shlomo and Mark Elliot*
- 11:50 - A CTA Model Based on the Huber Function. *Jordi Castro*

- 12:15 - Closing remarks

(*) - Short paper in USB proceedings