

Course: Some hot topics in contemporary statistics

13th June 2016

The aim of the workshop is to provide an overview on four topics through relevant information and some good references. Two topics related to public statistics and two more general ones will be covered.

Topics:

- **Small Area Estimation**
(Isabel Molina, Universidad Carlos III, Madrid)
- **Causal Inference**
(Mateo Rojas-Carulla, University of Cambridge and Max Planck Institute, Tübingen)
- **Measuring Wage Inequalities Between Men and Women**
State of the Art Methods and Current Research
(Mihaela Anastasiade, Université de Neuchâtel)
- **Big Data**
(Thibaut Lienart, University of Oxford)

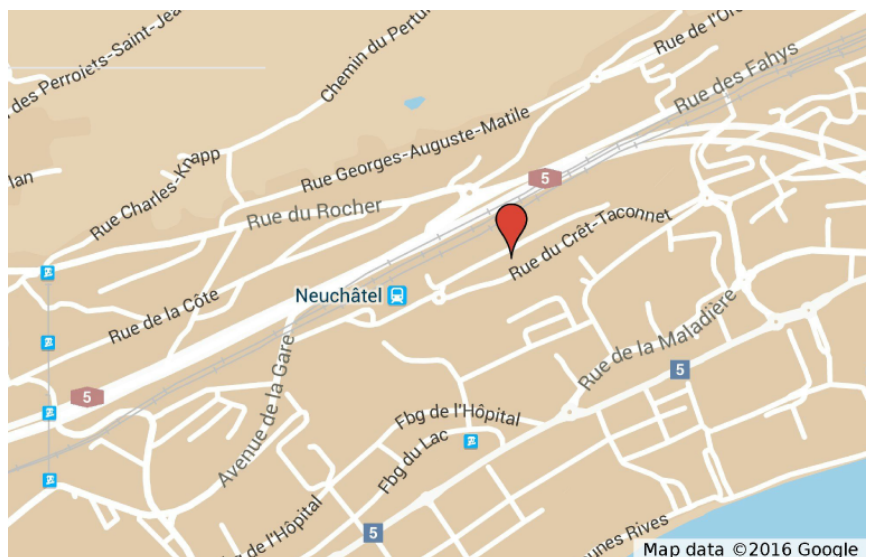
The talks will be given in English.

Price (with lunch) 130 CHF/person

Date 13th June 2016

Place Office fédéral de la statistique / Bundesamt für Statistik
Espace de l'Europe 10
2010 Neuchâtel

Registration Until 16th May, by email: sss@stat.ch



Schedule

09:30	–	10:15	Coffee & croissants	Waiting for trains
10:10	–	10:15	Welcoming	M. Wilhelm
10:15	–	11:15	Small Area Estimation	I. Molina (Univ. Carlos III, Madrid) The aim of this talk is to give a broad and simple introduction of what exactly small area estimation is, when it can be used and what the hypotheses are under which such models apply.
11:15	–	11:25	Break	
11:25	–	12:25	Causal Inference	M. Rojas-Carulla (Univ. of Cambridge / MPI) One of the main problems in the use of statistics in the public debate is the erroneous amalgam between <i>correlation</i> and <i>causality</i> . As a consequence, many misleading conclusions are brought in the public debate, as for instance in politics and public policy. This talk has the aim of giving the basic concepts of causality and of giving some of what the key ingredients are to establish and test causality.
12:30	–	13:50	Lunch	Hôtel Alpes et Lac
14:00	–	15:00	Wage Inequalities	M. Anastasiade (Univ. of Neuchâtel) Wage discrimination based on gender is prohibited by law in Switzerland. However, in the instances where it occurs, it is difficult to quantify it. Since the seminal work of Blinder and Oaxaca in the 70s, many methods have been proposed, usually based on data collected by means of surveys. This talk will discuss some state-of-the art methods used to measure wage inequality. A new technique based on a calibration approach will also be introduced.
15:00	–	15:20	Coffee break	
15:20	–	16:20	Big Data	T. Lienart (Univ. of Oxford) 'Big Data' is one of the main buzz words in statistics and other related fields these days. But what exactly is Big Data, in particular, what are the opportunities, the challenges and the pitfalls? This talk aims at demystifying some of the concepts surrounding the term and give practical recent examples of some of the successes and failures in that field.
16:20	–	16:30	Conclusion	
		16.30	Apéro	

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