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## Tutorial on "A tutorial on Quantile and M-Regression"

July 14, 2016 University of Pisa

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The tutorial will take place in Aula Mac-Win, Dipartimento di Economia e Management, University of Pisa (via Cosimo Ridolfi 10 – Pisa)

### Lecturers

Domenico Vistocco – Department of Economics and Law, University of Cassino, Italy

- Conditional mean and conditional quantiles
- The simple and multiple quantile regression model
- Sampling distribution of the quantile regression estimator
- Inference on conditional quantiles
- Equivariance property, model validation, estimation of the response conditional distribution
- Looking insight the estimation procedure: the simplex algorithm

Nikos Tzavidis (Social Statistics & Demography, University of Southampton)

- Defining robustness
- Estimating the centre (location) of a distribution
- Quantiles, M-quantiles & expectiles as location parameters
- Regression quantiles, M-quantiles & expectiles
- Robust Estimation for Generalized Linear Models
- Quantile, M-quantile, Expectile regression for discrete outcomes (Focusing on count outcomes)
- Quantile/M-quantile Multilevel Regression
- Using quantiles to measure heterogeneity

The school is application oriented; all the techniques will be shown in action using the software R

# Schedule

 $9:30\text{-}13:00 \quad Domenico\ Vistocco$ 

13:00-14:00 Lunch

14:00-15:30 Domenico Vistocco

15:30-18:00 Nikos Tzavidis

#### ACCOMODATION

We recommend workshop participants to book the hotel as soon as possible as there might be other concurrent events in Pisa during the dates of the workshop. The following hotels offer special rates to participants of events organized at the University of Pisa (UoP). Please do ask for them when booking. Hotels close to the conference venue include (all within walking distance – max 15 min):

- RESIDENCE LE BENEDETTINE Lungarno Sidney Sonnino
  18 <u>www.residence.pi.it</u> <u>http://en.residence.pi.it/</u> This is UoP Official Guesthouse.
  Excellent location, but note that this hotel does not offer breakfast.
- HOTEL REPUBBLICA MARINARA Via Matteucci, 81 56125 Pisa Tel. 050.3870100 Fax 050.3870200 <a href="http://www.hotelrepubblicamarinara.it/">http://www.hotelrepubblicamarinara.it/</a> info@hotelrm.it
- **HOTEL DI STEFANO** Via S. Apollonia, 35 56127 Pisa Tel. 050.553559 Fax 050.556038 http://www.hoteldistefano.it/ hds@email.it
- **HOTEL ROMA** Via Bonanno, 111 56126 Pisa Tel. 050.554488 Fax 050.550164 http://www.hotelroma.pisa.it/ info@hotelroma.pisa.it
- **HOTEL ROYAL VICTORIA** Lungarno Pacinotti, 12 56126 Pisa Tel. 050.940111 Fax 050.940180 http://www.royalvictoria.it/ mail@royalvictoria.it
- **HOTEL VERDI** Piazza della Repubblica, 5 56125 Pisa Tel. 050.598947 Fax 050.598944 http://www.verdihotel.it/ hotelverdi@sirius.pisa.it
- **HOTEL BOLOGNA** Via Mazzini, 57 56125 Pisa Tel. 050.502120 Fax 050.43070 <a href="http://www.hotelbologna.pisa.it">http://www.hotelbologna.pisa.it</a> info@hotelbologna.pisa.it

However, booking online with some advance is often cheaper, and you could also choose among nice B&B and other hotels. We recommend to book a hotel that is in the city center. Before booking a room, please check Tripadvisor for the best options: <a href="http://www.tripadvisor.com/Hotels-g187899-Pisa">http://www.tripadvisor.com/Hotels-g187899-Pisa</a> Province of Pisa Tuscany-Hotels.html

Check also Airbnb (Pisa): <a href="https://www.airbnb.it/s/Pisa-Italia">https://www.airbnb.it/s/Pisa-Italia</a> and Couchsurfing <a href="https://www.airbnb.it/s/Pisa-Italia">www.couchsurfing.com</a>!

See also, ARTY HOLIDAYS <a href="http://www.artyholidayhomes.com/">http://www.artyholidayhomes.com/</a>

## **USEFUL LINKS**

Pisa Buses <a href="http://www.cpt.pisa.it/">http://www.cpt.pisa.it/</a> International Airport Galileo Galilei <a href="http://www.pisa-airport.com/">http://www.pisa-airport.com/</a> Railway Station <a href="http://www.trenitalia.com/">http://www.trenitalia.com/</a>