

ASTRO@STATS 2017

SINO-ITALIAN WORKSHOP ON ASTROSTATISTICS

A ONE-DAY WORKSHOP ON CURRENT TOPICS AT THE INTERFACE
OF ASTRONOMY, PHYSICS AND STATISTICS

DEPARTMENT OF STATISTICAL SCIENCES
UNIVERSITY OF PADOVA

FRIDAY SEPTEMBER 8, 2017

PROGRAMME



UNIVERSITÀ
DEGLI STUDI
DI PADOVA



ISTITUTO CONFUCIO
ALL'UNIVERSITÀ DI PADOVA
帕多瓦大学孔子学院



Dipartimento
di Fisica
e Astronomia
Galileo Galilei



Friday September 8, 2017

REGISTRATION SC140 (08.30-09.00)

WELCOME SC140 (09.00-09.30)

09.00	Vice Rector for International Relations	Prof. Alessandro PACCAGNELLA (University of Padova)
09.10	Chair of the Department of Statistical Sciences	Prof. Tommaso DI FONZO (University of Padova)
09.20	Chair of the Department of Physics and Astronomy	Prof. Francesca SORAMEL (University of Padova)

J.C.F. Gauss SC140 (09:30-11:00)

ASTROPHYSICS MEETS STATISTICS

Chair: Alessandra R Brazzale (University of Padova)

09.30	Investigating the Cosmic Web with Topological Data Analysis	Jessi CISEWSKI-KEHE (Yale University)
10.00	Quasars: the Beacons of the Universe and the Challenge for Machine Learning	Maria SÜVEGES (Max Planck Institute for Astronomy Heidelberg)
10.30	Photometric Classification of Supernova with a Biased Training Set	David VAN DYK (Imperial College London)

Coffee Break "B. Colombo" Library (11:00-11:30)

G. Galilei SC140 (11:30-12:30)

PHYSICS MEETS STATISTICS

Chair: Denis Bastieri (University of Padova & INFN Padova)

11.30	New Statistical Analyses for the Neutrino Mass Hierarchy Determination	Luca STANCO (INFN Padova)
12.00	Nonparametric Semi-Supervised Classification with Application to Signal Detection in High Energy Physics	Alessandro CASA (University of Padova)

Lunch (12:30-14:30)

Confucius SC140 (14:30-16:00)

CHINA MEETS ITALY

Chair: Chongqi Zhang (Guangzhou University)

14.30	TBA	Junhui FAN (Guangzhou University Center for Astrophysics)
15.00	New Statistical Analyses for the Neutrino Mass Hierarchy Determination	Emilio CIUFFOLI (Chinese Academy of Sciences)
15.30	State-Space Modeling and Identification of Large-Dimensional Multivariate Time-Series	Giorgio PICCI (University of Padova)

Coffee Break "B. Colombo" Library (16:00-16:30)

A. Dent SC140 (16:30-17:00)

JUNIOR SPEED SESSION

Chair: Lorenzo Maragoni

16.30	Covariance-Consistent Vector ARMA Modeling	Zhu BIN (University of Padova)
16.35	Spatial and Time Clustering of the High-Energy Photons Collected by the Fermi LAT	Denise COSTANTIN (Guangzhou University)
16.40	Finite Dirichlet Mixture Modeling for Classification and Detection of New Classes of Variable Stars	Prince JOHN (University of Padova)
16.45	Model Independent Searches for New Physics via Parametric Anomaly Detection	Grzegorz M KOTKOWSKI (University of Padova)
16.50	Line-Profile Variations in Radial-Velocity Measurements Using a Skew Normal Distribution	Umberto SIMOLA (University of Padova)
16.55	Searching for Gamma Ray Sources in the Extra-Galactic Space: A Statistical Analysis of the Fermi LAT Data	Andrea SOTTOSANTI (University of Padova)

G. Galilei SC140 (17:00-17:30)

PHYSICS MEETS STATISTICS

17.00	Extraordinary Claims: the 0.000029% Solution	Tommaso DORIGO (University of Padova & INFN Padova)
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POSTER SESSION AND CLOSING RECEPTION "B. Colombo" Library (17:30-18:30)

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