

Statistical dependence: general issues and sequences of regressions

Sequences of regressions in joint or single responses provide a framework for assessing pathways of dependence, as they develop over time.

Such pathways may often be modeled locally and it may become simpler to understand them when a graph captures corresponding conditional independences.

It is to be shown when and why this happens and how the recent results, on sequences of regressions with independences captured by graphs, can be exploited in analyzing and understanding pathways of dependences and in the planning of follow-up studies.

Sir David R. Cox

is Honorary Fellow, Nuffield College, Oxford, and a member of the Department of Statistics, University of Oxford, UK. In 2010 he won the Copley Medal of the Royal Society 'for his seminal contributions to the theory and applications of statistics'.

Nanny Wermuth

is Professor of Statistics at Chalmers University Sweden, and Senior Research Scientist Awardee at the International Agency for Research on Cancer (IARC), Lyon, France. She is elected member of the German Academy of Sciences.

Venue

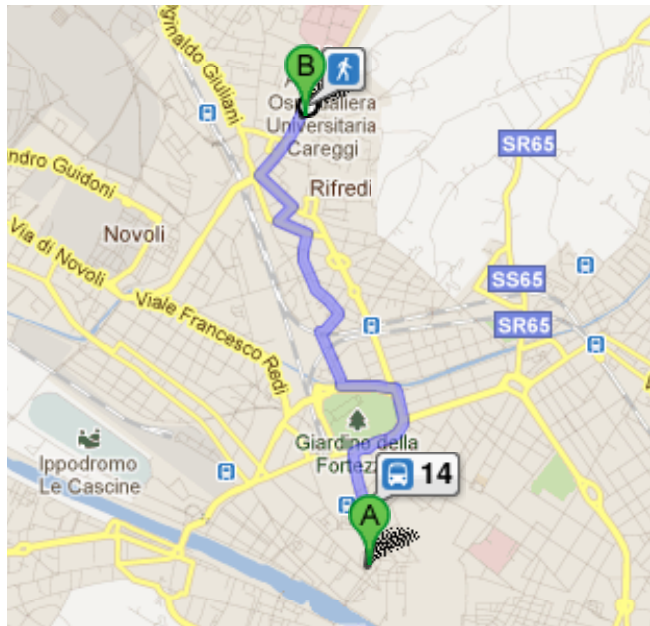
Dipartimento di Statistica "G. Parenti"

viale Morgagni, 59, 50134 FIRENZE

Plesso Didattico

viale Morgagni, 44, 50134 FIRENZE

Form the S. Maria Novella train station (A), BUS 14 (15m) to the Careggi Hospital (B).



Organized by

Università degli Studi di Firenze
Corso di Laurea in Statistica
Facoltà di Economia

Informations

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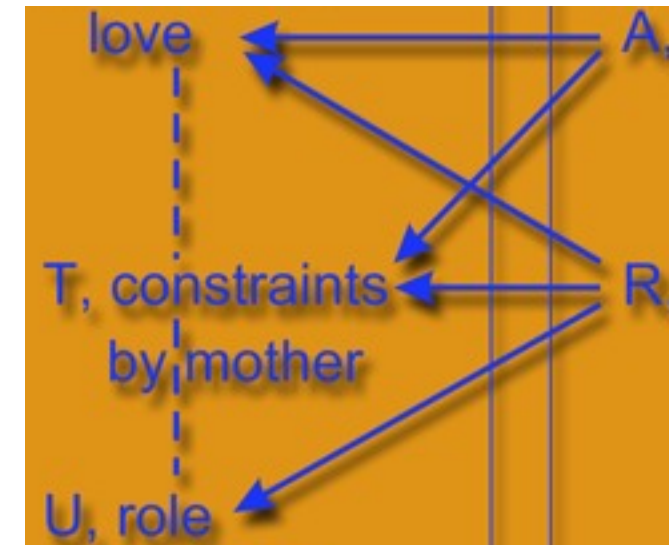
Statistical dependence: general issues and sequences of regressions

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Chalmers University Sweden, IARC Lyon France



Florence,
12, 13 and 14 December 2011

Università degli Studi di Firenze
DIPARTIMENTO DI STATISTICA "G. PARENTI"

Statistical dependence: general issues and sequences of regressions

Nanny Wermuth

David R. Cox

Monday, December 12

10:00-11:00

David Cox. Relation between theory and application in statistics (Special Lecture part 1)

11:00-12:00

Nanny Wermuth. Motivating examples from observational and intervention studies

14:30-17:00

David Cox, Nanny Wermuth. Definitions and properties of sequences of regressions

Tuesday, December 13

10:00-11:00

David Cox. Relation between theory and application in statistics (Special Lecture, part 2)

11:00-12:00

Nanny Wermuth. Constructing graphs from data and modifying them

14:30-17:00

David Cox, Nanny Wermuth. Changes in dependences and avoiding distortions in follow-up studies

Wednesday, December 14

10:00-12:00

Giovanni Marchetti, Nanny Wermuth, David Cox. Question time: discussions and interpretation of specific applications

Within the short Course two lectures by

David R. Cox

12 and 13 December 2011

Relation between theory and application in statistics

Monday, December 12, 10:00

Part 1

Idealized sequence of investigation
Issues of design and measurement
Types of statistical model: examples from botany, physics, medical sociology, veterinary science

Tuesday, December 13, 10:00

Part 2

Connection with graphical models
Interpretation
Role of theory
Role of foundational issues