INTERNATIONAL SCHOOL OF MATHEMATICS «GUIDO STAMPACCHIA»

56th Workshop: GRAPH THEORY, ALGORITHMS AND APPLICATIONS
Second Edition

ERICE-SICILY: 25 SEPTEMBER - 3 OCTOBER 2011

Sponsored by: • Italian Ministry of University and Research • Sicilian Regional Government • Mathematics Department, University of Salerno • Computer Science, System and Production Department University of Rome "Tor Vergata"

PROGRAMME AND LECTURERS

Directed Hypergraphs: Algorithms and Applications
• G. AUSIELLO, “Sapienza” University of Rome, IT

Graphs of Polytopes and the Simplex Algorithm
• F. EISENBRAND, EPFL Lausanne, CH

Approximation Algorithms for Graphical TSP
• N. GARG, Indian Institute of Technology, Delhi, IN

Shortest Paths in Road Networks
• A. GOLDBERG, Microsoft Research - Silicon Valley, LA Avenida Mountain View, CA, US

Bilevel Programming and Price Optimization Problems
• M. LABBE, Universite Libre de Bruxelles, BE

Polyhedral Approaches for Combinatorial Optimization
• G. RINALDI, CNR, Rome, IT

Optimization in Routing Problems
• M.G. SPERANZA, University of Brescia, IT

Graph algorithms
• R.E. TARJAN, Princeton University and HP, NJ, US

Models and Algorithms for Vertex Coloring Problems
• P. TOTH, University of Bologna, IT

Algorithm Engineering for Graph Clustering
• D. WAGNER, Karlsruhe Institute of Technology, DE

Instantaneous Approach to the Steiner Problem
• M. LABBE, Universite Libre de Bruxelles, BE

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PURPOSE OF THE WORKSHOP

Graph problems have applications in many fields and typically require multidisciplinary approaches.

This Course aims at bringing together leading scientists, junior researchers and PhD students from several areas in order to discuss, possibly in a systematic and organic way, different approaches for solving graph problems.

The Course is organized in plenary lectures held by internationally renowned speakers.

The intended audience consists of PhD students and junior researchers interested in graph problems, coming from several areas including (but not limited to) the design, analysis and experimentation of algorithms, operations research, optimization, and discrete mathematics.

APPLICATIONS

Persons wishing to attend the Workshop should apply by e-mail to the Co-Director of the Workshop:
• Professor Raffaele CERULLI
D.M. – Università degli Studi di Salerno
Via Ponte don Melillo – 84084 FISCANO (SA), Italy
Tel +39.089.963326 – Fax +39.089.963300
email: raffaele@unisa.it

They should specify:
 i) date and place of birth, together with current nationality;
 ii) affiliation;
 iii) address, e-mail address.

PLEASE NOTE

Participants must arrive on 25 September, not later than 7 pm.

Closing Date for Applications: 15 July 2011

DIRECTORS OF THE WORKSHOP

POETIC TOUCH

According to legend, Erice, sun of Venus and Neptune, founded a small town on top of a mountain (750 metres above sea level) more than three thousand years ago. The founder of modern history — i.e. the recording of events in a methodic and chronological sequence as they really happened without reference to mythical causes — the great Thucydides (~500 B.C.), writing about events connected with the conquest of Troy (1183 B.C.) said: «After the fall of Troy some Trojans on their escape from the Achaean entered Sicily by boat and as they settled near the border with the Sicanians all together they were named Elymi: their towns were Segesta and Erice.» This inspired Virgil to describe the arrival of the Trojan royal family in Erice and the burial of Anchises, by his son Aeneas, on the coast below Erice. Homer (~1000 B.C.), Theocritus (~300 B.C.), Polybios (~200 B.C.), Virgil (~50 B.C.), Horace (~20 B.C.), and others have celebrated this magnificent spot in Sicily in their poems. During seven centuries (XIII-XIX) the town of Erice was under the leadership of a local oligarchy, whose wisdom assured a long period of cultural development and economic prosperity which in turn gave rise to the many churches, monasteries and private palaces which you see today.

In Erice you can admire the Castle of Venus, the Cyclopean Walls (~800 B.C.) and the Gothic Cathedral (~1300 A.D.). Erice is at present a mixture of ancient and medieval architecture. Other masterpieces of ancient civilization are to be found in the neighbourhood: at Motya (Phoenician), Segesta (Elymian), and Selinunte (Greek). On the Aegeadian Islands — theatre of the decisive naval battle of the first Punic War (264-241 B.C.) — suggestive neolithic and paleolithic vestiges are still visible: the grottoes of Favignana, the carvings and murals of Levanzo. Splendid beaches are to be found at San Vito Lo Capo, Scopello, and Cornino, and a wild and rocky coast around Monte Cofano: all at less than one hour’s drive from Erice.

More information about the Erice Workshop can be found on the following addresses:
http://www.graphalgorithms.it/Erice2011

DIRECTORS OF THE WORKSHOP