



**SOI ADVANCED COURSE ON**  
**BIOMECHANICS OF THE TREES**

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*FIRENZE (ITALY), 20-23 june 2011*

**in cooperation with:**



**Società Toscana di Orticoltura**



**sponsored by**



*For information and on line application contact:  
Società di Ortoflorofrutticoltura Italiana  
e-mail: [soifi@unifi.it](mailto:soifi@unifi.it)*



**SOI ADVANCED COURSE ON**  
**BIOMECHANICS OF THE TREES**  
**FIRENZE, 20-23 JUNE 2011**

The course is organised by the SOI (Società di Ortoflorofruitticoltura Italiana) in cooperation with SIA (Società Italiana di Arboricoltura), Department of Agronomy and Land Management of the University of Florence and Società Toscana di Orticoltura

The Course is dedicated to PhD students, postdoc scientists, researchers, professors, technicians and municipal arborists with a sound background in plant biology and arboriculture and will give an advanced knowledge and training on basic themes as well as research results related to plant physiology and biomechanics with special focus on plant stability.

English will be the official language.

The application form is available at SOI website  
**<http://www.soibs.it/altaformazione>**

The Course will include 20 hours of lectures and 10 hours of field work distributed over 4 days as shown on the annex 1

Participants will receive a certificate signed by the lecturers, as well as the Organizers.

Registration fees (annex 2) include 20 hr of lectures at Villa Bardini, 10 hours of field work in Bardini Garden and Boboli Park, working material and lunches.  
SOI / SIA / ISA Members benefit of a 10% reduction in registration fees.

A get together party will be organised on Sunday 19 June from 19.30 to 22.00.

The Course will be given the Orangerie of the Giardino Bardini, Costa S. Giorgio 2, Florence, at walking distance from the main downtown.

Course Director is Prof. Francesco Ferrini, University of Florence

**Application deadline is 30 April 2011**

*For information and on line application contact:*  
*Società di Ortoflorofruitticoltura Italiana*  
*e.mail: [soifi@unifi.it](mailto:soifi@unifi.it)*

# BIOMECHANICS OF THE TREES

## Annex 1 - Timetable (draft)

	<i>20 June</i>	<i>21 June</i>	<i>22 June</i>	<i>23 June</i>
9.00	A. STOKES Trunk structure Cell wall structure	R. ENNOS Mechanics of cork and bark Branching and forking	F. TELEWSKI Thigmomorphogenesis Mechanopreception & physiology	H.C. SPATZ Tree risk assessment Hollow trunks (Excel demo)
10.30	CAFE	CAFE	CAFE	CAFE
11.00	F. TELEWSKI Effects of wood density Growth of xylem and phloem	H.C. SPATZ Fluid dynamics  T. FORCAUD Aerodynamics of trees and forests	A. STOKES Anchorage systems and root structure Control of anchorage. Root reinforcement	Implications for arborists and foresters: how to manage trees <i>We might try and do this during the week? Write down the most important points raised and suggest management options</i>
12.30	LUNCH	LUNCH	LUNCH	LUNCH
14.00	H.C. SPATZ Basic mechanics of wood Mechanical measuring techniques	F. TELEWSKI and H.C. SPATZ Dynamics of tree sway, damping and failure  H.C. SPATZ Shear and failure of hollow trunks	R. ENNOS Hydraulics	Fieldwork
15.30	CAFE	CAFÉ (at 15.00)	CAFE	
16.00	T. FORCAUD Prestressing and control of shape Wind-induced stresses in trees	Fieldwork	R. ENNOS Tree ecology, strategies and design  A. STOKES Demo ForestGales implications for foresters	
	17.30 DISCUSSION until 18.30	20.00 END	18.00 DISCUSSION until 19.00	20.00 END



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**Annex 2**

Registration fees must be paid after communication of acceptance sent by SOI secretariat

**Payment made before 30 april 2011**

SOI / SIA / ISA Members*	Non SOI / SIA / ISA Members
€ 450,00	€ 500,00

**Payment made after 30 april 2011**

SOI / SIA / ISA Members*	Non SOI / SIA / ISA Members
€ 500,00	€ 550,00

\* membership has to be validated at registration time (please, indicate membership number).

Please, take note of the deadlines for registration and remember to update your SOI / SIA /ISA 2011 membership for taking advantages by a reduced fee.

Payments must be made via Bank transfer to:  
Cassa di Risparmio di Firenze - AGENZIA 1  
Sesto Fiorentino (Florence - Italy)  
IBAN code: IT64 A061 6038 1030 0001 1476 C00  
BIC SWIFT code: CRFIIT3FXXX

To the order of:  
Società di Ortoflorofrutticoltura Italiana  
Viale delle Idee, 30  
50019 Sesto Fiorentino (Firenze - ITALY)

Object: Advanced Course on Biomechanics

Once arranged, a copy of the payment statement must be sent by e-mail or fax to  
Francesco Baroncini - SOI Secretariat  
e-mail: [soifi@unifi.it](mailto:soifi@unifi.it); fax +39 055 4574071

Registration fees include:  
20 hrs of lectures at Villa Bardini  
10 hrs of field works at Giardino Bardini and Boboli Park  
admission ticket to Giardino Bardini and Boboli Park  
working lunches from 20 to 23 june  
welcome cocktail  
working material  
certificate of attendance



**SOI ADVANCED COURSE ON**

# **BIOMECHANICS OF THE TREES**

## **PRE-REGISTRATION FORM**

Please enter your personal details below. These data will be used for all contacts prior and during the seminar.

First Name(s): .....

Last Name: .....

Place of birth: .....

Date of birth: .....  Male  Female

Present Nationality: .....

Education Details: .....

.....

Occupation: .....

.....

Country: .....

ZIP Code: .....

City: .....

Street: .....

Organisation/Institution: .....

Telephone: .....

E-mail: .....

Payments via bank transfer to:

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