

*Abstract Book*

OF

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SEPTEMBER, 28<sup>TH</sup> – OCTOBER 2<sup>ND</sup>

VITERBO, ITALY

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<b>Thursday, 29th September.</b> <b>SPECIAL SESSION IN HONOUR OF 25th ANNIVERSARY OF UNIVERSITY OF TUSCIA. AULA BLU, FACOLTA' DI AGRARIA</b>		
<i>TREE RINGS IN THE STUDY OF CLIMATE AND OF CULTURAL HERITAGE</i>		
9.00-9.05	Presentation of the congress	
	Prof. Manuela Romagnoli - University of Tuscia, IID	
9.05-9.30	Welcome to the participants	
	Prof. Marco Mancini – Rector of the University	
	Prof. Eddo Rugini – Dean of the Agriculture Faculty	
	Prof. Maria Andaloro – Dean of the Cultural Heritage Faculty	
	<b>Special Session:</b>	<b><i>Chair: Ute Sass-Klaassen</i></b>
9.40-10.10	D. Eckstein	Human time in tree rings
10.10-10.30	F. Biondi	Environmental signals in tree rings
10.30-10.50	M. Friedrich, B. Kromer	Lateglacial / Holocene tree-ring chronologies and radiocarbon calibration
10.50-11.00	Discussion	
11.00-11.30	Coffee break	
	<b>Opening Session: Lectures</b>	
	<b>DATING/(PRE) HISTORICAL DENDROCHRONOLOGY</b>	<b><i>Chair: Katarina Čufar</i></b>
11.30-11.45	A. Billamboz	Classes of dating quality
11.45-12.00	S. Wrobel, D. Eckstein	An everlasting question with archaeological wooden samples: which ones come from one and the same stem?
12.00-12.15	M. Grabner, A. Klein, D. Geihofer, H. Reschreiter, F. Eckart Barth, T. Sormaz, R. Wimmer	First dendrochronological results from the Bronze Age salt mine at Hallstatt, Austria
12.15-12.30	R. Pukiene, E. Ozalas	Medieval oak chronology from the Vilnius Lower Castle
12.30-12.45	T. Okochi, Y. Hoshino, H. Fujii, T. Mitsutani	Nondestructive tree-ring measurements for Japanese oak and Japanese beech using micro-focus X-ray computerized tomography
12,45-13,00	Conclusions	
	Prof. Ervedo Giordano - Academy of Forest Science, UNIF	
	Prof. Antonio Leone -Head of DAF	
<b>Thursday, 29th September afternoon. Pianeta Benessere. Lectures</b>		
	<b>DATING/(PRE) HISTORICAL DENDROCHRONOLOGY</b>	<b><i>Chair: Tomasz Wazny</i></b>
14.30-14.45	M. Zunde	Dendrochronological dating of lake settlements in Latvia
14.45-15.00	M. Schaub, K. F. Kaiser, B. Kromer, S. Talamo	Status of the Swiss Lateglacial tree-ring chronologies

15.00-15.15	A. Vitas	Dating of pine timber from historical buildings in Lithuania
15.15-15.30	T. Eißing	Dendro-provenancing in Thuringia and the southern part of Saxony - Anhalt
15.30-15.45	N. Martinelli	Sapwood estimates on archaeological oak woods from Northern Italy
15.45-16.00	O. Pignatelli	Dendrochronological dating of fir in southern Italy: the example of the Church of San Pietro in Galatina (Lecce, Puglia)
16.00-16.30	Coffee break	
	<b>DENDROECOLOGY/FOREST DISTURBANCES</b>	<b><i>Chair: Ignacio García Gonzáles</i></b>
16.30-16.45	I. Lūce, G. Brūmelis, D. Elferts, M. Strazds, M. Zunde	Past development of some natural <i>Pinus sylvestris</i> stands on mires in Latvia
16.45-17.00	L. Poursartip, K. Pourtahmasi, H. Hooshmand Nazerani	Usage of dendrochronology to find negative effects of pollution on annual growth rate of some Plane tree ( <i>Platanus orientalis</i> ) individuals in Karaj city in Iran
17.00-17.15	S. Fraver, A. S. White	Disturbance dynamics of old growth <i>Picea rubens</i> forests of northern Maine, USA
17.15-17.30	I. Drobyshev, H. Linderson, K. Sonesson	Relation between crown condition and tree diameter growth in southern Swedish oaks
17.30-17.45	J. G. A. Lageard, D. B. Wilson, N. Cresswell, L. E. Cawley, H. E. Jones, S. J. M. Caporn	Wood growth response of <i>Calluna vulgaris</i> to elevated N deposition and drought
	<b>DENDROGEOMORPHOLOGY</b>	<b><i>Chair: Tom Levanič</i></b>
17.45-18.00	M. C. Stefanini	Impact of wind on trees: differences between a rocky coast and a coastal plain
18.00-18.15	R. Fantucci	Dendrogeomorphological analysis of shore erosion along Lake Bolsena (Central Italy)
18.15-18.30	M. Pelfini, G. Leonelli, G. Muttoni, M. Santilli, A. Zanzi	Spectral analysis of mountain pine tree-ring chronologies
18.30-18.45	E. Muntán, E. Gutiérrez, P. Oller, P. Martínez	Dendrogeomorphological features of <i>Pinus uncinata</i> to study avalanche dynamics in the Pyrenees
18.45-19.45	<b>POSTER SESSION: (PRE) HISTORICAL DENDROCHRONOLOGY, DENDROECOLOGY, DENDROGEOMORPHOLOGY</b> <b><i>Chair: Alar Läänelaid</i></b>	

**Friday, 30th September**

7.30	Excursion to Duna Feniglia (Grosseto)	
13.00	Tarquini, lunch	
15.00	Visit to the Etruscan Necropolis, to the National Museum and to the town of Tarquinia	

Saturday, 1st October. Pianeta benessere. Lectures		
	DENDROCLIMATOLOGY	<i>Chair: Michael Grabner</i>
8.15-8.30	M. Siebenbrunner, W. Oberhuber	Impact of drought on regeneration of an inner Alpine <i>Pinus sylvestris</i> stand
8.30-8.45	M. Mácová	Dendroclimatological comparison of invasive <i>Pinus strobus</i> and native <i>Pinus sylvestris</i> in different habitats in the Czech Republic
8.45-9.00	I. Popa, Z. Kern	Dendroclimatological research at timberline in National Park Calimani, Romania
9.00-9.15	A. Deslauriers, S. Rossi, T. Anfodillo, H. Morin	Synchronization of maximum growth rate and summer solstice in North America and European conifer species: coincidence or plant adaptation?
9.15-9.30	P. Fonti, I. García-González, N. Solomonoff	Temperature signal in chestnut earlywood vessel size: is there an echophysiological explanation?
9.30 -9.45	B. Neuwirth, F. H. Schweingruber, M. Winiger	Spatial pattern of central European tree ring growth. A dendroecological network analysis
9.45-10.15	Coffee break	
		<i>Chair: Hitoshi Yonenobu</i>
10.15-10.30	E.A. Kasatkina, O.I. Shumilov, M. Krapiec, G. Jacoby	Stardust component in tree growth variation
10.30-10.45	O.I. Shumilov, E.A. Kasatkina, N. A. Morner, A.G. Kanatjev, I.Y. Kirtsideli	Paleoclimatic potential of the northernmost juniper trees in Europe
10.45-11.00	M. M. Fauria; L. Andreu, J.J. Camarero, O. Bosch, E. Gutiérrez.	Increasing aridity is enhancing Silver fir ( <i>Abies alba</i> Mill.) water stress in its south western distribution limit
11.00-11.15	Z. Kern, I. Popa	Climate growth relationship of species from a mixed stand of Apuseni Mts, Romania
11.15-11.30	M. De Luis, K. Cufar, A. Di Filippo, J. C. González-Hidalgo, M. Jurc, G. Piovesan, J. Raventós	Climate-growth relationship of Aleppo Pine ( <i>Pinus halepensis</i> ) from three different Mediterranean localities
11.30-11.45	A. Di Filippo, F. Biondi, M. Brunetti, K. Cufar, M. De Luis Arrillaga, M. Grabner, M. Maugeri, T. Nanni, G. Piovesan, M. Romagnoli, B. Schirone	Spatial and altitudinal climatic signals identified in a beech ( <i>Fagus sylvatica</i> ) tree-ring network on the Eastern Alps
11.45-12.00	Q. B. Zhang	Tree rings and climate on the Qinghai-Tibetan Plateau
12.00-13.00	POSTER SESSION: DENDROCLIMATOLOGY	<i>Chair: Carlo Urbinati</i>
Saturday, 1st October afternoon. Pianeta Benessere: Lectures		
	WOOD ANATOMY	<i>Chair: Anne Crone</i>
14.00-14.15	S. Leal, A. Gonzales, J. Vázquez, P. Duncker, H. Spiecker, H. Pereira	Cork oak wood: a hard material to sample and to measure
14.15-14.30	J. Gričar, P. Oven, K. Čufar	Seasonal dynamics of secondary phloem growth ring formation in Norway spruce ( <i>Picea abies</i> ) and silver fir ( <i>Abies alba</i> )

14.30-14.45	I. Dorado, J. Gričar, K. Čufar, M. De Luís, J. Raventós	Annual radial growth rhythm of <i>Pinus halepensis</i> trees from dry-semiarid sites in Spain. First results
14.45-15.00	K. Čufar, J. Gričar, M. Zupančič, U. Schmitt, G. Koch	Anatomical structure and topochemical investigations in waterlogged archeological wood
15.00-15.15	I. García González, M. Rodríguez Martínez de Llano	Dendroecological analysis of the earlywood vessels of <i>Quercus pyrenaica</i> Willd. on two contrasting sites of soil water regime
15.15-15.30	O. Kobayashi, Y. Takei, W. Umakoshi	Embossed tree rings designed for teaching dendrochronology to visually impaired students
15.30-15.45	J.W. Seo, U. Schmitt, D. Eckstein, R. Jalkanen	Wood formation of Scots pine in northern Finland during five consecutive vegetation periods
15.45-16.15	Coffee break	
	<b>DENDROCHEMISTRY</b>	<b><i>Chair: Cleofe Stefanini</i></b>
16.15-16.30	M. Weigl, M. Grabner, R. Wimmer, G. Helle, G. Schleser	Studying radial and axial variation of stable isotopes within a single oak tree
16.30-16.45	A. Kagawa, A. Sugimoto	<sup>13</sup> C evidence of the use of previous year's photoassimilates for tree ring formation in <i>Larix gmelinii</i>
16.45-17.00	T. Levanič	Stable isotopes in oak ( <i>Quercus robur</i> L.) rings as indicator of oak die-back
17.00-17.30	<b>POSTER SESSION: WOOD ANATOMY/ DENDROCHEMISTRY</b>	<b><i>Chair: Sigrid Wrobel</i></b>
	<b>CONCLUSION</b>	<b><i>Dieter Eckstein, Qi-Bin Zhang, Gianluca Piovesan</i></b>
<b>19.00</b>	<b>TUSCANIA, CONFERENCE DINNER</b>	

<b>POSTER SESSION: (PRE) HISTORICAL DENDROCHRONOLOGY</b> <b><i>Chair: Alar Läänelaid</i></b>		
1	A. Klein, M. Grabner, D. Geihofer, H. Reschreiter, F. Eckart Barth, R. Wimmer	Reconstructing forest activities in prehistoric Hallstatt, Austria
2	C. Mills	The development of long native Scots pine ( <i>Pinus sylvestris</i> ) chronologies for Scotland 1: chronologies from old-aged living trees
3	A. Crone	The development of long native Scots pine ( <i>Pinus sylvestris</i> ) chronologies for Scotland 2: looking for locally-grown Scots pine in Scottish buildings
4	D. Geihofer, M. Grabner, J. Gelhart, R. Wimmer, H. Fuchsberger	New master chronologies from historical and archaeological timber in Eastern Austria
5	E. Szychowska-Krapiec	Dendrochronological dating of old mines from southern Poland
6	I. Botar	The new results of the Transylvanian dendrochronological project
7	M. Zunde	Sakore V 4.0- a straightforward dendrochronological dating program for Windows

8	H. Yonenobu, S. Tsuchikawa, H. Oda	A new, non-destructive dating method using near-infrared spectroscopy and its calibration by Hinoki cypress tree-ring chronology
9	J. Meadows, R. Howard, N. Nayling, C. Bronk-Ramsey, G. Cook, A. Bayliss, D. Hamilton	Use of Bayesian modelling of AMS radiocarbon dates to clarify the dendrochronology of Baguley Hall, Manchester, United Kingdom
10	M. Romagnoli, V. Bartoli, M. Sarlatto, P. Passalacqua, S. Rinaldi	Perugino, Berto di Giovanni, Giannicola di Paolo: dendrotypology of panel paintings in The Galleria Nazionale Umbria
11	A. Grynaeus	Changes in the number of sapwood-rings on oak in Hungary
<b>DENDROECOLOGY/FOREST DISTURBANCES</b>		
12	A. Cejkova, T. Kolar	Dendrochronological Investigations of the Šumava Mountains and Šumava Foothills, Czech Republic
13	I. Boeren, M. Friedrich, M. Knipping, H.P. Stika, M. Küppers	Fire and water. The dendro-ecological reconstruction of a Late-Glacial pine forest in Reichwalde, E-Germany
14	I. Koval, V. Voron, A. Leman, O. Vorontsova	Radial growth of oak under recreational influence in the Forest-Steppe of Eastern Ukraine
15	O. Eggertsson	Volcanoes and forest remains in Iceland
16	Y. Sahle, U. Sass-Klaassen, F. Sterck, F. Bongers	Application of dendrochronology to sustainable forest management in high mountain forests of Ethiopia
17	A. Bär, A. Bräuning, J. Löffler	The dendroecological potential of dwarf shrubs – a case study from the high mountains in Norway
18	A. Lääneld	Growth of trees at a dropped mining area in North Estonia
<b>DENDROGEOMORPHOLOGY</b>		
19	M. Krąpiec	Dendrogeomorphological analysis of landslide areas in Beskid Niski (SE Poland)
20	R. Fantucci R, C. Margottini, H. Gaertner	Dendrochronology and wood anatomy as tools to investigate slope instability evolution: case study of the Cardoso landslide (Tuscany, Italy)
21	M. Pelfini, M. Bozzoni, M. Santilli	Supraglacial tree-ring analyses as a tool to reconstruct the surface instability of a debris covered glacier: the case of Miage Glacier (Western Italian Alps)
22	M. Ehmis, M. Bollschweiler	Temporal and spatial variations of debris-flow activity on a forested cone – a dendrogeomorphological approach
<b>POSTER SESSION: DENDROCLIMATOLOGY</b>		
<b><i>Chair: Carlo Urbinati</i></b>		
23	E. Liang, D. Eckstein, L. Wang, X. Shao	Drought-induced light rings in Chinese pine ( <i>Pinus tabulaeformis</i> Carr.) and Meyer spruce ( <i>Picea meyeri</i> Rehd et Wils) in semi-arid areas in North China
24	D. Elferts	Influence of the extreme climatic conditions on radial growth of <i>Pinus sylvestris</i> in Latvia
25	D. Friedrichs, B. Neuwirth, J. Löffler	Dendroecological reconstruction of precipitation variability in the northern low mountain ranges, Germany

26	I. Dashkovskaya, A. Buzikin, L. Pshenichnikova, W. Soukhovolsky	Short cycles of radial increment dynamics as a result of Echo-Effects
27	K. Loacker, K. Pagitz, W. Oberhuber	Influence of climate warming on spread of walnut ( <i>Juglans regia</i> L.) within inner Alpine dry valley
28	L. Chojnacka-Ozga, W. Ozga	Dendroclimatological analysis of European beech ( <i>Fagus sylvatica</i> L.) from Bieszczady Mountains
29	M. Krąpiec, E. Szychowska-Krąpiec	Paleoclimatological interpretation of Scots pine chronologies from NE Poland
30	S. Haeseler, D. Eckstein, S. Wrobel	SINCOS (Sinking Coasts)- New dendrochronological and dendroclimatological results
31	H. Yonenobu, D. Eckstein, K. Gotanda, T. Nakagawa, P. E. Tarasov, Y. Yasuda	Reconstruction of warm-season precipitation for north-west Pacific using the <i>Picea ajanensis</i> ring-width chronology from Sakhalin Island
32	M. Ohyama, H. Yonenobu, D. Eckstein, M. Hanzawa, M. Suzuki	Tree-ring research of Japanese cedar ( <i>Cryptomeria japonica</i> D. Don) from north-eastern Japan with respect to its dendroclimatic potential
33	N. V. Lukina , T. A.Sukhareva	Pollution-induced changes in phytomass of coniferous tree stands in the Kola peninsula
34	E. Batllori, J. J. Camarero, E. Gutiérrez	Contemporary rates of treeline shift in the Pyrenees do not support predictions of rapid migration of trees in response to climate warming
35	K. Nicolussi, M. Kaufmann, G. Patzelt, J. van der Plicht, A. Thurner	A Holocene tree-line record from the Central Eastern Alps, based on the dendrochronological analysis of living trees and subfossil logs
36	R. Castorina, A. Di Filippo, G. Piovesan	Dendroecological analysis of beech ( <i>Fagus sylvatica</i> L.) on Mount Etna Natural Park (Sicily, Italy)
37	B. Neuwirth, F.H: Schweingruber, M Winiger	Central European pointer years
<p style="text-align: center;"><b>POSTER SESSION:</b>  <b>WOOD ANATOMY / DENDROCHEMISTRY</b>  <b>Chair: Sigrid Wrobel</b></p>		
38	M. Perovic	The properties of rays and pores of Greek maple ( <i>Acer heldreichii</i> Orph.) in central Serbia
39	J. Gričar, M. Zupančič, K. Čufar, P. Oven	Xylem formation of Norway spruce at two growth sites in Slovenia in years 2002 and 2003
40	S. Rossi, T. Anfodillo, R. Menardi, A. Deslauriers	A new tool for sampling microcores from tree stems
41	O. Kobayashi, T. Okochi	The potential of microfocus X-ray CT for wood structure and wood density analyses
42	M. S. Herrero, I. García González, E. Díaz Vizcaino.	Dendrochronological analysis of earlywood and latewood chronologies of oak in the Northwest of the Iberian Peninsula
43	N. Loader, M. Hall, J. Rolfe	Reconstructing temperature and relative humidity variability using a mechanistic model of oxygen and hydrogen isotope fractionation in tree-rings.



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