

**DAY1 (SUNDAY 18/9/2011) MORNING**

*from 9.00*

**REGISTRATION** (University of Patras Conference Centre)

10.00 – 16.00

**EXCURSION**

*to Oiniades , Plevrona, ancient theatres*

*lunch at the town of Messologhi*

**DAY1 (SUNDAY 18/9/2011) EVENING**

19.30

**WELCOME RECEPTION – OPENING CEREMONY** (Old Municipal Hospital garden, close to Roman Odeion)

**Martin Kreeb**, archeologist, Assoc. Professor, University of Patras, Greece  
*Ancient Theatres: Historical and Architectural Development, Spread and Use*  
**(invited)**

**EXHIBITION:** ancient theatre slide show

*to run in Old Municipal Hospital room for the duration of the Conference*  
**(open to the general public)**

**NOTE:** a daily coach service will be available to transport participants from hotels to and from Conference venues

**DAY2 (MONDAY 19/9/2011) MORNING**

from 8.00

**REGISTRATION**

<b>9.00 – 9.40</b>	<b>PAPER SESSION AP1 Archaeology &amp; Performance</b>
9.00 – 9.20	<b>A. Cocchi</b> , Emeritus Professor, Bologna University, Italy <i>Theatre design in ancient times: science or opportunity?</i>
9.20 – 9.40	<b>Th. Vovolis (invited)</b> , Dramatiska institutet, Stockholm, Sweden <i>Mask, Actor, Theatron and Landscape in classical Greek Theatre</i>
<b>9.40 -10.20</b>	<b>PAPER SESSION AS1 Acoustic Measurements &amp; Signal Processing</b>
9.40 – 10.00	<b>A. Tsilfidis<sup>1</sup>, Th. Vovolis<sup>2</sup>, E. Georganti<sup>1</sup>, P. Teubner<sup>2</sup>, J. Mourjopoulos<sup>1</sup></b> <sup>1</sup> University of Patras, <sup>2</sup> Dramatiska institutet, Stockholm, Sweden <i>Acoustic radiation properties of ancient Greek theatre masks</i>
10.00 – 10.20	<b>T. C. Fu, T-C Wang</b> , National Cheng-Kung University, Taiwan <i>Reproduction of Sound Field using a Virtual Loudspeaker Array System</i>
<b>10.20 – 11.00</b>	<b>POSTER SESSION P1 Conference Centre foyer</b>
10.20 – 11.00	<b>G.Cambourakis, A. Sotiropoulou, A. Savvopoulou, G.Poulakos, J.Tzouvadakis, A.Stamos</b> , National Technical University, Athens, Greece <i>Investigations of the Acoustics of the ancient theatre of Epidauros</i>
10.20 – 11.00	<b>A. M. Torres</b> , Universidad de Castilla-La Mancha, <b>B. Pueo</b> , Universidad de Alicante, <b>J. J. López</b> , Universidad Politecnica de Valencia, Spain <i>Experiments on Room Plane Wave Decomposition for Virtual Acoustics</i>

**10.40 – 11.00***Coffee break*

<b>11.00 – 12.00</b>	<b>PAPER SESSION AM1 Analysis &amp; Modeling</b>
11.00 – 11.20	<b>N. Haddad</b> , Hashemite University, Jordan <i>Vitruvius and the Acoustics of Ancient Theatre: Analytical and Comparative Study According to Recent Results</i>
11.20 – 11.40	<b>J. Rindel</b> , Odeon A/S, Scion-DTU, Denmark <i>Echo problems in ancient theatres and a comment to the 'sounding vessels' described by Vitruvius</i>
11.40 – 12.00	<b>G. Vallejo-Ortega, J. Sánchez-Riverade, M. la Iglesia-Santamaría</b> , Architecture School, Valladolid, Spain <i>Acoustic Study of a Roman Theatre in Hispania: Colonia Clunia Sulpicia</i>
<b>12.00 – 13.00</b>	<b>PAPER SESSION AR1 Architecture, Ritual spaces &amp; Roofed theatres</b>
12.00 – 12.20	<b>E. Sellountos, D. Polyzos, S. Paipetis</b> , University of Patras, Greece <i>Acoustic Behaviour of the Chamber of Dead in the Nekomanteion of Acheron River</i>
12.20 – 12.40	<b>K. Chourmouziadou</b> , University of Thrace, Greece, <b>J. Kang</b> , University of Sheffield, UK <i>Architectural and scenery design implementation for the improvement of the soundscape of ancient theatres</i>
12.40 – 13.00	<b>N. Barkas</b> , University of Thrace, Greece <i>Current Operation of Ancient Greek Theatres: the problem of environmental noise</i>

**13.00 – 14.00***Lunch break*

**DEMOS:** Interactive auralisation terminals of ancient theatres and ritual spaces  
*by the ERATO project and the Patras audiogroup*

**DAY2 (MONDAY 19/9/2011) AFTERNOON**

**14.00 – 15.00**

**KEYNOTE SPEECH K1**

**Barry Blesser**, Blesser Associates, Boston, USA  
*An Analysis of the Aural Experience of Ancient Spaces* - presentation via Skype  
**(invited)**

**15.00 – 16.00**

**PAPER SESSION AP2  
Archaeology & Performance**

15.00 – 15.20 **D. Lubman**, DL Acoustics, California, USA

*Uncanny acoustic effects at Chichen Itza: Intentional design?*

15.20 – 15.40 **B. Fazenda, I. Drumm**, University of Salford, UK

*Recreating the Sound of Stonehenge*

15.40 – 16.00 **M. Mota**, Drama Lab(LADI), University of Brasilia, Brazil

*Meter Matters: Embodied Rhythms at Stage as a Challenge to the Acoustics of Ancient Theatre*

**16.00 – 16.20**

*Coffee break*

**16.20 - 17.00**

**TUTORIAL SESSION T1  
Analysis & Modeling**

**Jens Holger Rindel**, Odeon A/S, Scion-DTU, Lyngby, Denmark  
*The ERATO project and its contribution to our understanding of the acoustics of ancient theatres*  
**(invited)**

**17.00 – 17.40**

**PAPER SESSION AM2  
Analysis & Modeling**

17.00 – 17.20 **M. Navvab**, University of Michigan, USA; **F. Bisegna**, Sapienza University of Rome, Italy, **G. Heilmann**, Gfai Tech GmbH, Berlin, Germany

*Acoustic Performances of Ancient Theatres: Real Ancient versus Virtual Architecture*

17.20 – 17.40 **G. Iannace, L. Maffei, P. Trematerra**, Second University of Naples, Italy

*The Acoustic Evolution of The Large Theatre of Pompeii*

**17.40 –18.00**

*Coach to Patras Odeion site*

**18.00 – 19.00**

**WORKSHOP W1  
Patras Roman Odeion**

*In-situ acoustic response measurements in the Roman Odeion  
drinks in old city*

**DAY3 (TUESDAY 20/9/2011) MORNING**

from 8.00

REGISTRATION

9.00 - 11.00

**PAPER SESSION AM3  
Analysis & Modeling**

- 9.00 - 9.20 **N. Prodi, A. Farnetani, R. Pompoli**, Università di Ferrara, Italy  
*Validation of a numerical code for edge diffraction by means of acoustical measurements on a scale model of an ancient theatre*
- 9.20 - 9.40 **P. Economou<sup>1</sup>, P. Charalampous<sup>1</sup>, S. Ioannides<sup>1</sup>, P. Polykarpou<sup>2</sup>**  
<sup>1</sup>P.E. Mediterranean Acoustics Research and Development, Cyprus, <sup>2</sup>University of Patras, Greece  
*The significance of sound diffraction effects in predicting acoustics in ancient theatres*
- 9.40 - 10.00 **J. Tartarin**, CNRS Institute, University of Poitiers, France  
*On the acoustics of the gallo-roman theater of Sanxay (France)*
- 10.00 - 10.20 **P. Polykarpou, S. Vassilantonopoulos+, J. Mourjopoulos**, University of Patras, Greece  
*Acoustic simulation of the Ancient Theatre of Kourion in Cyprus*
- 10.20 - 10.40 **J. Austnes<sup>1</sup>, K. Nore<sup>2</sup>, J. Aarstad<sup>2</sup>**  
<sup>1</sup>Sweco Norway AS, <sup>2</sup>Norsk Treteknisk Institutt, Norway  
*Cross laminated timber absorbent*
- 10.40 - 11.00 **G. Iannace, L. Maffei, F. Aletta**, Second University of Naples, Italy  
*Computer simulation of the effect of the audience on the acoustics of the Roman Theatre of Beneventum (Italy)*

11.00 - 11.20

Coffee break

11.20 - 12.00

**TUTORIAL SESSION T2  
Analysis & Modeling**

**Jean-Dominique Polack**, Professor, Université Pierre et Marie Curie/CNRS, France  
*The acoustics of antique theatres: Canac's life work revisited  
(invited)*

12.00 - 13.20

**PAPER SESSION AR1  
Architecture, Ritual spaces & Roofed theatres**

- 12.00 - 12.20 **A. Foteinou, D. Murphy**, University of York, UK  
*Perceptual validation in the acoustic modelling and auralization of heritage sites: The Acoustic Measurement and Modelling of St Margaret's Church, York, UK*
- 12.20 - 12.40 **C. Goussios, N. Tsinikas, K. Chourmouziadou, G. Kalliris**, Aristotle University of Thessaloniki, Greece  
*The Roman odeion of Nicopolis: Observations of architectural elements affecting its acoustics. Measurements & calculations of acoustic indices*
- 12.40 - 13.00 **R. Peral, N. Campillo, A. Cervero**, Miguel Hernandez University, Elche, Spain  
*Analysis of the acoustic parameters of the Basilica "Santa Maria" on the performance of the medieval liturgical masterpiece "El Misteri"*
- 13.00 - 13.20 **L. Tronchin**, University of Bologna, Italy  
*The acoustics of the Teatro Ideale by Francesco Milizia (1773)*

13.20 - 14.20

Lunch break

**DEMOS:** Interactive auralisation terminals of ancient theatres and ritual spaces  
*by the ERATO project and the Patras audiogroup*

**DAY3 (TUESDAY 20/9/2011) AFTERNOON**

14.20 – 15.20

**KEYNOTE SPEECH K2**

**Jens Blauert**, Emeritus Professor, IKA, Ruhr-University Bochum, Germany  
*Cognitive aspects of listening in performance spaces*  
(invited)

15.20 – 16.20

**PAPER SESSION AP3**  
**Archaeology & Performance**

15.20 – 15.40 **G. Karadenos, P. Karampatzakis, V. Zafranas**, Aristotle University of Thessaloniki, Greece  
*An approach into the acoustic evolution of ancient Odea*  
15.40 – 16.00 **K. Moschos**, Institute for Research on Music & Acoustics, Greece  
*Ancient Drama: A theater or an opera?*  
16.00 – 16.20 **K. Moschos, G. Schubert**, Institute for Research on Music & Acoustics, Greece  
*Proposals for the improvement of acoustics of ancient theaters*

16.20 - 16.40

*Coffee break*

16.40 – 17.20

**TUTORIAL SESSION T3**  
**Analysis & Modeling**

**Angelo Farina**, Professor, University of Parma, **Lamberto Tronchin**, Professor, University of Bologna, Italy  
*New measurement technique for 3D sound characterization in theatres*  
(invited)

17.20 – 19.20

**SPECIAL SESSION S1**  
**Acoustic potteries in ancient buildings**

17.20 – 17.40 **J.-Ch. Valière<sup>1</sup>, B. Bertholon-Palazzo<sup>1</sup>, J.-D. Polack<sup>2</sup>, P. Carvalho**  
<sup>1</sup>Université de Poitiers, <sup>2</sup>Université Pierre et Marie Curie/CNRS, France  
*On the relation between Vitruve vasis and medieval acoustic potteries: Literary analysis of ancient texts and comparison with recent observations in situ*  
17.40 – 18.00 **P. Karampatzakis<sup>1</sup>, V. Zafranas<sup>1</sup>, S. Polychronopoulos<sup>2</sup>**  
<sup>1</sup>Aristotle University of Thessaloniki, <sup>2</sup>University of Patras, Greece  
*A study on Aristoxenus acoustic urns (The Vitruvian secret)*  
18.00 – 18.20 **S. Polychronopoulos, D. Skarlatos, D. Kougias**, University of Patras, Greece  
*The use of resonators in ancient Greek Theatres*  
18.20 – 18.40 **J.-D. Polack**, Université Pierre et Marie Curie/CNRS, France  
*Acoustic potteries in southern Albania*  
18.40 – 19.00 **J.-Ch. Valière, B. Bertholon-Palazzo**, Université de Poitiers, France  
*Contribution of the knowledge of the acoustic pottery in medieval and modern churches*  
*Statistical studies of about twenty five French edifices*  
19.00 – 19.20 **J.-C. Valière, B. Bertholon-Palazzo**, Université de Poitiers, France  
*Acoustic pottery in medieval and modern churches and temples in Europe: the state of the knowledge*

17.20 – 18.00

**POSTER SESSION P2**  
**Conference Centre foyer**

17.20 – 18.00 **G.Cambourakis, S.Dalianis, A.Sotiropoulou**, National Technical University, Athens, Greece  
*Acoustics and Intelligibility of the Dionysus Ancient Greek Theater at the Acropolis of Athens*  
17.20 – 18.00 **B. Boren, M. Longair**, University of Cambridge, UK  
*A method for the acoustic modeling of past soundscapes*

21.00

**CONFERENCE DINNER**  
*(location to be announced)*

**DAY4 (WEDNESDAY 21/9/2011) MORNING**

**9.00 - 10.40**

**PAPER SESSION AM4  
Analysis & Modeling**

- 9.00 - 9.20 **N. Prodi, A. Farnetani, R. Pompoli, P. Fausti**, Università di Ferrara, Italy  
*Acoustics and architecture in ancient open air theatres*
- 9.20 - 9.40 **G.Cambourakis**, National Tech. Univ. of Athens, Athens, Greece  
*Oiniades ancient theatre acoustical assessment*
- 9.40 - 10.00 **F. Gugliermetti, F. Bisegna, A. Carraro**, Sapienza University of Rome, Italy  
*A modern reading of ancient theatres architecture*
- 10.00 - 10.20 **M. Lopez, S. Pauletto, G. Kearney**, The University of York, UK  
*Virtual acoustics and performance Spaces in Medieval English Drama*
- 10.20 - 10.40 **Th. Niaounakis**, Acoustic consultand, Greece  
*The Acoustics of the Ancient Theatre of Hephaistia – Limnos Island, Greece*

**10.40 – 11.00**

*Coffee break*

**11.00 - 12.20**

**SPECIAL SESSION S2  
Analysis, Measurement & Modeling of Epidaurus Theatre**

- 11.00 – 11.20 **T. Lokki, A. Southern, S. Siltanen, L. Savioja**, Department of Media Technology, Aalto University, Finland  
*Studies on Epidaurus with a hybrid room acoustics modeling method*
- 11.20 – 11.40 **K. Angelakis, J. Rindel, Odeon A/S, A. Gade**, Danish Technical University, Denmark  
*Theatre of the Sanctuary of Asklepios at Epidaurus and the Theatre of Ancient Epidaurus: Objective measurements, computer simulations and listening tests*
- 11.40 – 12.00 **S. Vassilantonopoulos\*, P. Hatziantoniou, N. Tatlas, T. Zakynthinos, D. Skarlatos, J. Mourjopoulos**, University of Patras, Greece  
*Measurements and Analysis of the Acoustics of the Ancient Theatre of Epidaurus*
- 12.00 – 12.20 **S. Psarras, M. Koyntoyras**, Acoustic consultants, Greece  
*Acoustic and environmental parameter measurements in Epidaurus Ancient Theatre*

**12.20 – 13.20**

*Lunch break – Preparation for departure*

**DAY4 (WEDNESDAY 21/9/2011) AFTERNOON**

**13.20- 16.40**

*Travel from Patras to Epidaurus Theater*

*Lunch - coffee break*

**16.40 – 18.30**

**WORKSHOP W2  
Epidaurus ancient theatre**

*In situ actor-demo / acoustic measurement*

**CLOSING**

**18.30 - 22.00**

*Return from Epidaurus to Patras or to Athens*