Partners:

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- National Trust of England, Wales and Northern Ireland (GB)
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Damage risk assessment, economic impact and mitigation strategies for sustainable preservation of cultural heritage in times of climate change

Public Event EU Project *Climate for Culture* Presentation of Results

9-10 July 2014

8.30 - 17.00

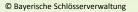
Max Joseph Saal, Munich Residenz

Residenzstraße 1, 80333 Munich

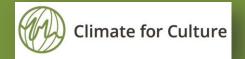












Programme

Wednesday, 9 July 2014

Time	Speaker / Topic				
8.30	Conference office opens / registration				
9.00	Welcome N.N. Bavarian Administration of State Palaces, Gardens and Lakes (DE) Introduction Klaus Sedlbauer, Fraunhofer Institute for Building Physics (DE)				
9.30	Keynote lecture The climate of tomorrow – what do we know and what we don`t know Guy Brasseur, German Climate Service Center (DE)				
10.15	The "Climate for Culture" project — an overview <u>Johanna Leissner</u> , Constanze Fuhrmann, Ralf Kilian, Uta Pollmer and Urban Kaiser, Fraunhofer-Gesellschaft (DE)				
11.00	Coffee				
11.30	Dynamical downscaling of anthropogenic climate change simulations for Europe: from global climate model results to data suitable as input for building simulations <u>Daniela Jacob</u> and Lola Kotova, Max-Planck Institute for Meteorology (DE)				
11.50	Downscaling the effect of anthropogenic climate change with a regionally coupled atmosphere-ocean-model <u>Uwe Mikolajewicz</u> , Max-Planck Institute for Meteorology (DE)				
12.10	Climate change impact on cultural heritage <u>Dario Camuffo</u> and Chiara Bertolin, Institute of Atmospheric Sciences and Climate, Italian National Research Council (IT)				
12.45	Lunch				

Time	Speaker / Topic				
14:00	The "Climate for Culture" approach: from global climate to works of art <u>Ralf Kilian</u> , Fraunhofer Institute for Building Physics (DE)				
14.20	Building simulation as a tool for future projections of indoor climates in historic buildings <u>Florian Antretter</u> , Fraunhofer Institute for Building Physics (DE)				
14:50	Risk and damage assessment <u>Jonathan Ashley Smith</u> , Consultant for Conservation Risk Assessment (GB)				
15.20	What will be the implications for energy use in historic buildings in Europe in the future? <u>Tor Broström</u> , Campus Gotland, Uppsala University (SE) and Jos van Schijndel, Technical University Eindhoven (NL)				
15.45	Coffee				
16.15	Assessing the impact of climate change on conservation heating in National Trust historic houses <u>Nigel Blades</u> and Katy Lithgow, National Trust (GB)				
16.30	Stakeholder experiences - putting "Climate for Culture" in the context of the National Trust <u>Katy Lithgow</u> , National Trust UK (GB)				
16.50	Socio-economic impact of climate change and cultural heritage: How do we value the welfare of future generations? Results from the visitor surveys in England, Sweden, Romania, Germany and Italy <u>Susanna Mourato</u> , Eleni Fimerelli and Chris Gaskell, Grantham Research Institute on Climate Change and the Environment, London School of Economics & Political Science (GB)				
17.20	Experience with the visitor surveys in Germany <u>Constanze Fuhrmann</u> and Johanna Leissner, Fraunhofer Brussels				
17.35	Discussion and conclusion				
18.00	End of the day				



Thursday, 10 July 2014

Time	Speaker / Topic	Time	Speaker / Topic	
8.30 9.00 9.15	Conference office opens / registration Welcome Learning from history – cultural heritage in times of climate change	13.30	Indoor climate control and mitigation strategies: methods and decision-making <u>Tomáš Vyhlídal</u> and Jiří Šolc, Faculty of Mechanical Engineering, Czech Technical University in Prague (CZ); Gustaf Leijonhufvud and Tor Broström, Campus Gotland, Uppsala University (SE); Ralf Kilian, Fraunhofer Institute for Building Physics (DE)	
9.35	Andreas Burmester and <u>Melanie Eibl</u> , Doerner Institut (DE) Collecting and assessing climate data – the "Climate for Culture" database <u>Henk Schellen</u> , Technical University Eindhoven (NL)	14.00	Sustainability in historic buildings is possible: A résumé of our "Climate for Culture" research studies Jochen Käferhaus, TB Käferhaus GmbH (AT)	
9.55	Isopleth ranges of historic materials <u>Nicole Krueger</u> , Wolfgang Hofbauer and Ralf Kilian, Fraunhofer Institute for Building Physics (DE) Experimental investigation on surface monitoring of materials in environmental conditions	14.20	Application of computational fluid dynamics (CFD) models for risk assessment and mitigation of indoor climates in historical buildings <u>Goran Simeunovic</u> , Tomáš Vyhlídal and Pavel Zítek, Faculty of Mechanical Engineering, Czech Technical University in Prague (CZ)	
	<u>Vivi Tornari</u> , Eirini Bernikola, Kostas Hatzigiannakis, Michalis Andrianakis and Nota Tsigarida, Institute of Electronic Structure and Laser, Foundation for Research and Technology (GR); Chiara Bertolin and Dario Camuffo, Institute of Atmospheric Sciences and Climate, Italian National Research Council (IT); Johanna Leissner, Fraunhofer Institute for Silicate Research (DE)	14.35	Generic sacred buildings – generating indoor climate and risk maps using an automated risk assessment method <u>Mathias Winkler</u> and Florian Antretter, Fraunhofer Institut for Building Physics (DE)	
10.40	Sorption model for the risk assessment of moisture derived deterioration of wood Pavel Zítek and <u>Tomáš Vyhlídal</u> , Faculty of Mechanical Engineering, Czech Technical University in Prague (CZ); Vivi Tornari and Eirini Bernikola, Institute of Electronic Structure and Laser, Foundation for Research and Technology (GR) Coffee		Coffee	
			Assessment of the hygro-thermal and energy performance of cultural heritage buildings in current and future climate change scenarios Paul Baker and <u>Anastasios Markopoulos</u> , School of Built & Natural Environment, Glasgow Caledonian University (GB); Nigel Blades, National Trust (GB); Florian Antretter, Fraunhofer	
11.00			Institute for Building Physics (DE)	
11.30	Mechanical degradation of a historic wooden cabinet: modelling of heat and moisture induced strain based on a reconstruction of the historical indoor climate <u>Zara Huijbregts</u> , Henk Schellen and Jos van Schijndel, Technical University Eindhoven (NL)	15.30	"Climate for Culture" – the decision-making support system Aleš Sládek and Oto Sládek, Kybertec Ltd. (CZ); <u>Vlatka Raičić,</u> Faculty of Civil Engineering, University of Zagreb (HR)	
11.45	The wall heating system (Temperierung) at Brezice Castle in Slovenia <u>Mihael Mirtič</u> , Gašper Stegnar and Marjana Šijanec Zavrl, Centre for Indoor Environment, Building Physics and Energy, Building and Civil Engineering Institute ZRMK (SI) Dubrovnik cathedral and St. Barbara's chapel - building simulation, validation and mitigation strategies <u>Vlatka Rajčić</u> , Ana Skender and Domagoj Damjanović, Faculty of Civil Engineering, University of Zagreb (HR)		DigiChart – a software for digitizing analogue data charts from thermo-hygrographs Jan Radon, Engineering Consulting & Software Development Jan Radon (PL)	
			Identification of the influence of climatic changes on heritage assets using a 3D optical microscope system Violeta Bokan Bosiljkov, Petra Štukovnik and Roko Žarnić, Faculty of Civil and	
			Geodetic Engineering, University of Ljubljana (SI)	
			Discussion and conclusion	
12.15	Lunch	18.00	Start of evening event and reception in the Kaisersaal	

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Closing Ceremony EU Project *Climate for Culture*

10 July 2014

18.00 - 22.30

Kaisersaal, Munich Residenz

Residenzstraße 1, 80333 Munich



Bayerische Schlösserverwaltung



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Programme

Johannes Hintersberger

State Secretary, Bavarian State Ministry of Finance, Regional Development and Regional Identity

> Bernd Schreiber President, Bavarian Administration of State Palaces, Gardens and Lakes

> > Dr. Angelika Niebler Member of the European Parliament

Prof. Dr. Alfred Gossner Executive Vice President for Finance, Controlling and Information Systems, Fraunhofer-Gesellschaft

> Dr. Kurt Vandenberghe Director, European Commission, Directorate General for Research and Innovation

> > Keynote: The Cultural History of Climate Prof. Dr. Wolfgang Behringer University of Saarbrücken

> > > Moderation Dr. Johanna Leissner Coordinator, Fraunhofer-Gesellschaft

18.00 – 19.00 Apéro and light refreshments

Musical programme:

pizzicato - The Munich String Quartet Minuets and Music – From Mozart to the 1920s

21.00 – 22.30 Reception and buffet