

### AM

8:00 - 9:00 **Registration & reception** 9:00 - 9:15 Opening & welcome Invited Lecture 9:15 – 9:45 Marie Claesson, Tor Broström Eight years of Energy Efficiency in Historic Buildings 1<sup>st</sup> Session Boundaries & obstacles 9:45 - 10:05Nelson Brito Mismatch, exclusion and inclusion - threats / opportunities for Historic Buildings in the current Energy Efficiency paradigm 10:05 - 10:25 Tineke Van der Schoor Valuation of medieval churches, towards an integration of expert's and laypersons' views 10:25 - 10:45 Gustaf Leijonhufvud Standardizing the Indoor Climate in Swedish Churches: Opportunities, Challenges and Ways Forward 10:45 - 11:15Coffee break 2<sup>nd</sup> Session Investigation, Design & Feasibility (I) 11:15 - 11:35 Camilla Colla Integrated diagnostic approach for the structural and energetic evaluation of historic buildings 11:35 - 11:55Elodie Heberle Guidance for finding a sustainable balance between energy efficiency, comfort, moisture damage and cultural heritage value in historic building 11:55 - 12:15 Aitziber Egusquiza Supporting historic districts energy retrofitting through a comprehensive multiscale framework and its implementation in the EFFESUS DSS 12:15 - 12:35 Fredrik Berg Using the life cycle analysis approach for decision and policy support concerning built cultural heritage: Norwegian case studies

12:35 – 13:35 Lunch break

### ΡM

Invited Lecture		
13:35 – 14:05	Alexandra Troi Comfort and energy efficiency in historic buildings – the 3ENCULT experience	
3 <sup>rd</sup> Session	ign & Feasibility (II)	
14:05 – 14:25	Richard Atkins	
14:05 - 14:25	Integrating conservation aspects into energy-related retrofit assessments for 20th century historic buildings: Canongate Housing	
14:25 – 14:45	Joaquim Flores The investigation of energy efficiency in Oporto World Heritage Site traditional buildings	
14:45 – 15:05	Giovanna Franco Eco-efficiency in a UNESCO World Heritage site: safeguard, innovation and compatibility	
15:05 – 15:25	<b>Stefan Bichlmair</b> Comparison of Different Systems for Internal Wall Insulation with Reversible Application for Historic Buildings	
15:25 – 15:55	Coffee break	
4 <sup>th</sup> Session Using and improving energy models		
15:55 – 16:15	Arkadiusz Kupczak Modelling impact of collections on indoor climate and energy consumption in museums, libraries and archives	
16:15 - 16:35	<b>Marco Giuliani</b> A new Tool for accurate Energy and Comfort Assessment of Historic Building	
5 <sup>th</sup> Session Education & traini	ng	
16:35 – 16:55	Moses Jenkins Historic Scotland's Approach to Training and Education for Energy Efficiency in Traditional Buildings	
16:55 – 17:15	Andrew Richards Cornwall Council Skills training and Energy Saving Initiatives	

International Conference on Energy Efficiency and Comfort of Historic Buildings BRUSSELS, 19-21 October 2016 www.eechb.eu



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Invited Lecture				
9:15 – 9:45	Magnus Wessberg An evaluation of three different methods for energy efficient indoor climate control in Skokloster castle			
1 <sup>st</sup> Session Interventions: materials, systems & indoor climate (I)				
9:45 – 10:05	<b>Rick Kramer</b> Energy impact of ASHRAE's museum climate classes: full scale dynamic measurements in a state-of-the-art museum in Amsterdam			
10:05 - 10:25	<b>Ralf Kilian</b> Evaluation of different wall heating systems in historic monuments – Aspects of Energy and Conservation			
10:25 - 10:45	<b>Nigel Isaacs</b> Domestic Hot Water Systems – constant with changes			
10:45 - 11:15	Coffee break			
2 <sup>nd</sup> Session Interventions: materials, systems & indoor climate (II)				
11:15 - 11:35	Stavroula Thravalou The impact of architectural design interventions and occupant interactions on thermal comfort in built vernacular heritage			
11:35 – 11:55	Roger Curtis Fabric Improvements for energy efficiency in historic and traditional buildings – keeping it simple			
11:55 – 12:15	<b>Evy Vereecken</b> Capillary active interior insulation: a discussion			
12:15 – 12:35	<b>Poul Klenz Larsen</b> A lime based mortar for thermal insulation of medieval church vaults			

12:35 – 13:35 Lunch break

## ΡM

Invited Lecture		
13:35 – 14:05	<b>Caroline Rye</b> The role of monitoring and feedback in the refurbishment of traditional buildings: New Court, Trinity College, Cambridge	
3 <sup>rd</sup> Session Monitoring & feedback		
14:05 – 14:25	Janice Foster Building Performance Evaluation - A design approach for refurbishment of a small traditional building in Scotland	
14:25 – 14:45	Aranzazu Galan Gonzalez Understanding our heritage: Monitoring of energy and environmental performance of traditional terrace houses of Northern England	
14:45 – 15:05	Julien Borderon On-site assessment of hygrothermal performance of historic wall before and after retrofitting with insulation	
15:05 – 15:25	<b>Camilla Colla</b> Thermal behaviour and comfort of a building pre- and post- intervention: the case of the Engineering School of Bejàr	
15:25 – 15:55	Coffee break	
4 <sup>th</sup> Session Governance		
15:55 – 16:15	Elena Lucchi Assessing environmental sustainability and energy effi-ciency of historic buildings: a new certification tool for de-livering cultural values in renovation processes	
16:15 – 16:35	<b>Eneko Jokin Uranga</b> The impact of the energy efficiency regulation on residential built heritage. The case of gros district in the city of San Sebastian	
16:35 – 16:55	Anna Donarelli Energy performance certificates and historic buildings: a method to encourage user participation and sustainability in the refurbishment process	

16:55 – 17:15 Closing session



# Option 1: Veterinary School / Wiels

9:00	Meet us at the Royal Library
9:15	Departure for the Veterinary School
9:45	Arrival at the Veterinary School
10:30	Gathering for the second visit
10:45	Departure for the second visit: Wiels
11:00	Arrival at Wiels
11:45	Gathering
12:00	Departure for the Royal Library
12:30	Arrival at the Royal Library

# Option 2: leder Zijn Huis / VUB

8:45	Meet us at the Royal Library
9:00	Departure for leder Zijn Huis
9:45	Arrival at leder Zijn Huis
10:30	Gathering for the second visit
10:45	Departure for the second visit: VUB
11:00	Arrival at the VUB
12:00	Gathering
12:15	Departure for the Royal Library
12:45	Arrival at the Royal Library



The Veterinary School





leder Zijn Huis





#### Nelson Brito and Rute Castela

Deep assessment" before "deep renovation": saving money, time and Cultural Values

#### Petra Eriksson, Aitziber Equsquiza and Tor Broström

The potential for implementing a decision support system for energy efficiency in the historic district of Visby

#### Joel Gustafsson, Caroline Rye and Oliver Smith

Retrofit Internal Insulation at New Court, Trinity College, Cambridge: Options, Issues and Resolution Through Material Sampling and Modelling

#### Sonja Jurošević and Ragna Grytli Energy efficiency retrofit of historic buildings: concepts, approaches and interventions

#### Giovanni Litti and Amaryllis Audenaert

Representativeness of indoor climate monitoring for the target microclimate definition in museums

#### Oliver Smith, Joel Gustafsson and Caroline Rye

Balancing the competing demands of heritage and sustainability, the benefits and risks involved in sustainable retrofit: New Court, Trinity College, Cambridge

#### Maarten Vieveen and Tineke van der Schoor

Integral design method Energy efficient Restoration