



ITN-DCH: PROJECTING OUR PAST TO THE FUTURE

# ITN-DCH Newsletter

## March 2016

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## Secondment @ FBK, Trento (Italy)

by Diego Bellido Castañeda, ESR3

From 10<sup>th</sup> to 28<sup>th</sup> of February, it was the turn of FBK (Fondazione Bruno Kessler) to organize a new secondment within the ITN-DCH network. In this case, 6 fellows from academia, research and industry institutions participated in the different training activities. The 3DOM research group unit of FBK, which is specialized in accurate 3D measurements and reality-based 3D reconstruction problems, was in charge of organizing the event.

The training during the secondment was designed in order to cover each fellows' interest, as well as to provide training activities in the area of expertise of the hosting institution. According to that, the main topics can be sorted out into acquisition, processing, semantic and conceptual information and visual applications. In order to be able to work with all these topics, a cultural heritage site was selected as a data set. It aims to provide the data required for the training, initiate further collaborations between the fellows and

create new knowledge to be used in future applications.

The castle of Buonconsiglio was selected in order to provide the above objectives. This monument is located in the center of the city of Trento and it is one of the most important and visited CH sites in the Trentino-Alto Adige region in the north of Italy. The castle is composed of a series of buildings, and its interior is decorated with valuable frescos.

During four days, an intensive acquisition campaign was previously designed and executed at the castle. With the collaboration of the personnel of Buonconsiglio castle (special thanks to Matteo Rapana, Silvano Zamboni and Adriano Conci), several image-based data sets were produced covering usual

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Figure 1 (previous page): Fellow Rossella Suma, ESR 16 and Nicola Carboni ESR8 with the Asinou Church custodian  
 Figure 2: Secondment in Trento in images.

light management. The collected data was used for training in processing and data fusion. Additionally, the historical and semantic information will be used for the enrichment of the 3D information. Finally, an interactive viewer of the data was created with the goal to disseminate the work done.

Events like this are a great chance for brainstorming and working together in a supportive environment to solve real challenges, enhanced the research network and start further collaborations.

challenges in CH projects, such as color and



**FBK – 3DOM**  
 The 3DOM research unit of FBK Trento is actively involved in accurate measurements and reality-based 3D reconstruction problems.

Figure 3: Buonconsiglio Castle 3D online Viewer

Visit: <https://3dom.fbk.eu/>

# ESR11 Invited to Speak at a Local Conference: Phicaria V, Mazarrón, Spain

By Matthew Vincent, ESR 11



Figure 2: Secondment in Trento in images.

Figure 4: Matthew Vincent speaking @ Phicaria V Conference

From the 4th to the 6th of March, the 5th consecutive conference on the ancient cities of the Mediterranean entitled "Phicaria" took place in the city of Mazarrón, Spain. The conference was organised by Dr. Sebastián F. Ramallo Asencio from the Universidad de Murcia, Dr. María Milagros Ros Sala from the Universidad de Murcia, Dr. Lorenzo Abad Casal from the Universidad de Alicante, and Dr. Xavier Aquilué Abadías from the Museo de Arqueología de Cataluña. The conference focused on contemporary topics such as the archaeology of Carthage in Tunisia during the Arab Spring, or the ongoing struggle for Alexandria to find its place between the past and the present. Athens made an appearance as one of the universal places that encapsulates these struggles around the rest of the Mediterranean. Presentations ranged all around the Mediterranean, touch on major cities and historical sites, working through the current state of research and, in

many cases, the major challenges faced in these areas due to political or economic instability.

ESR11, Matthew Vincent, was invited by the conference to present a special session on the use of new technologies in service of the heritage and archaeology of these Mediterranean cities, particularly in light of the challenges presented by other speakers throughout the weekend. Vincent presented the general aspects of research of the ITN-DCH, and in particular his own focus in archaeology, databases, and digital acquisitions of archaeological sites, highlighting the ITN-DCH as a project that can help address the struggles brought up in other presentations. Vincent concluded his presentation on the positive note that new technology, particularly as exemplified in the ITN-DCH, offers hope for a rich future for

continued work and research in the ancient Mediterranean cities.

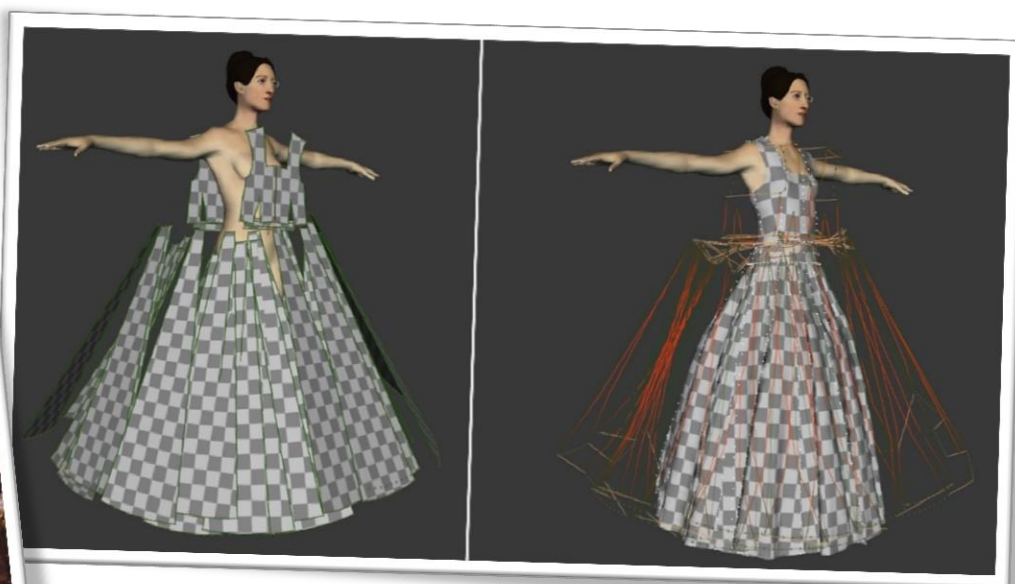
# Fashion Heritage Research

By Louis Cuel, ESR 4



Figure 5: Historical costume exhibition: Louis XVI, robe à la française, 18th century

Figure 6: 2D pattern placement (left) skirt with seams



Fashion heritage can be considered as a beautiful visual demonstration of the social needs of its wearers, and as such, shows in a clearly understood visual way what people of differing times and cultures wanted socially. In the emerging knowledge society, there is an increasing demand for high quality, enriched digital content and the continuous education has already become a must. Cultural Heritage institutions are in a prime position to deliver the kind of unique learning resources. For the application of technology to heritage to become a viable historical recreation tool, a combination of technological, economic and creative challenges must be overcome.

Fashion institutions and fashion archives are facing new challenges in showcasing and displaying fashion. It is not only about displaying garments, but also bringing them alive by explaining "life" and the stories around them: who they belonged to, how they were done, how they were used and reused, how they were worn, how they moved on a body and what they must have felt like to the original wearers. The public wants to fully experience or ideally even try on the showcased garments especially if historical or Haute Couture. This information is impossible to convey in a traditional gallery setting. It is more and more frequent that

within the exhibitions the public is given the opportunity to try on reproductions of the garments displayed.

The "behind the scenes" work is becoming more and more an alternative way to visit fashion collections, blurring the traditional museum boundaries between collections on display and those held in store. But this is not always possible for a number of reasons: space first of all, but also controlled environments that can be stressed by visits, lack of personnel, possible damage to the collections. Virtual access to the costumes will ensure the possibility to discover larger parts of European fashion heritage.

Unige works on the costume modelling and integration for historical applications. The main effort is in improving the natural outlook of historic garments, and the outlook of the avatar itself, in order to create a realistic visualization of textiles. This will lead new people to cultural tourism in archaeological and historical sites in Europe, by giving them the wish of knowing more about this topic.

The following tasks are actual research topics: Garment automatic positioning Body design, Face texture acquisition, Motion capture acquisition and Pattern design.

**MIRALab**  
Where research means creativity

## MIRALAB UNIGE

Founded in 1989 and headed by professor Nadia Magnanat-Thalmann, Miralab is an interdisciplinary group that works in the field of Computer Graphics, Computer Animation and Virtual Worlds that works under the aegis of the Centre Universitaire Informatique (CUI), University of Geneva.

Visit <http://www.miralab.ch>

# The Maya in a Digital World

By Chance M. Coughenour, ESR 1

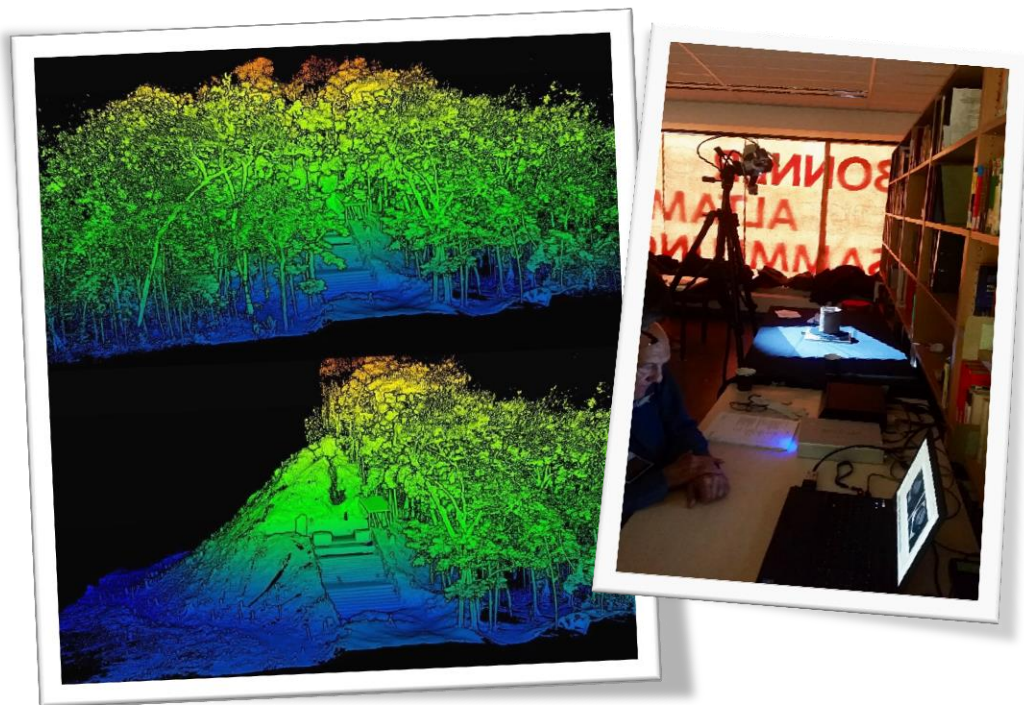


Figure 7: Vegetation removal at Maya Conference  
Figure 8: Demonstration during the conference.

Last December, partners and fellows of the ITN-DCH project participated in the 20th European Maya Conference hosted by the University of Bonn in Germany. For the first time as a central conference theme, the digital applications in the archaeological, historical, and epigraphic research of the ancient Maya were presented and discussed.

Often considered an ancient, homogeneous civilisation that mysteriously disappeared in the jungles around 800 CE, the diverse Maya are still very much alive today in the forests and mountains of Guatemala, Mexico, El Salvador, and Honduras. Thanks to the multidisciplinary investigations shared between European and American researchers, we can now interpret their complex, logossyllabic language, elaborate mathematics (one of the few ancient civilisations to invent zero), and their skilful records of celestial bodies using naked eye astronomy. At present, only a handful of their written books are known to have survived the European invasion and merciless burning of their 'heretic' books. Each year, tourists flock in the millions to explore many

of their ancient cities, seven of which are UNESCO World Heritage Sites. What's more, the contemporary Maya are relearning their ancient language through government funded education programs for adults and children, reestablishing a cultural connection with their ancestors.

In Bonn, hands-on training workshops were conducted during the first three days prior to a two-day symposium. The Maya writing system was taught at beginner, intermediate, and advanced levels by specialists in epigraphy and linguistics. In addition, and following the conference theme, a special workshop on digital documentation methods was jointly carried

out by representatives from the University of Bonn, Harvard University, AICON 3D Systems, and Chance Coughenour, the ITN-DCH (ESR1) fellow from the University of Stuttgart. Participants of the workshop were instructed on the theory and best use practices with hands-on training in photogrammetry, a Breuckmann structured light scanner as well as new digitisation methods for epigraphic drawing.

The first day of the symposium began with three presentations by ITN-DCH partners and fellows. The first presentation was MayaArch3D: A 3D-WebGIS for the Documentation and Analysis of Complex Archaeological Sites by Jennifer von



Schwerin and Markus Reindel from the Commission for Archaeology of Non-European Cultures at the German Archaeological Institute, an ITN-DCH associate partner. Next, George Bruseker, the ITN-DCH (ER1) fellow from FORTH Institute of Computer Science on Crete, and Laura Stelson from the University of Bonn together presented A Public Database and Digital Research Tool for Maya Iconography where they demonstrated the ICON-OGRAPH semantic database to help facilitate the growing complexity of epigraphic understanding and corresponding developments through the process of decipherment. Finally, Chance Coughenour (ESR1) and Prof. Dieter Fritsch from the

University of Stuttgart as well as Prof. Nikolai Grube, Kai Delvendahl, and Juan Aguilar from the University of Bonn presented New Frontiers in Archaeological Investigation at Uxul: The Integration of Terrestrial Laser Scanning and Photogrammetry from Moveable Objects to Architectural Groups. This talk outlined a portion of Chance's PhD research related digital documentation applications and visualisation methods for large, reality-based datasets for archaeology. Apart from the invited presentations by ITN-DCH members, two presentations in particular provoked interesting discussions relevant to the objectives of the ITN-DCH project. Mary Clark from Boston University examined the challenges of digital

preservation, the accumulation of 'born digital' data, and archival methods for archaeological projects, in her talk The Digital Dilemma: Preservation and the Digital Archaeological Record. Finally, the conclusory talk Pixels, Vectors, Polygons: Going Digital at the Corpus of Maya Hieroglyphic Inscriptions by Alexandre Tokovinine and Barbara Fash, from the Peabody Museum at Harvard University, elaborated on the innovations that new documentation methods have had on the investigation of one of the world's longest ancient texts, the Hieroglyphic Stairway at the UNESCO World Heritage Site of Copan in western Honduras.

## ITN-DCH 3rd Project Workshop, Nicosia, Cyprus

By Rossella Suma, ESR 16

The 3<sup>rd</sup> ITN-DCH Workshop was organized by CUT from the 30<sup>th</sup> of November to the 4<sup>th</sup> of December in Nicosia. The central theme was "Standardization – Archiving – Harvesting: Existing Cultural Heritage metadata interface and their relation to Semantic, Symbolic and Conceptual representations"

The experience of the meeting was enriched by a trip to Asinou church, where we had a long and engaging presentation from Dr Nicolaidis, which described the monument and his evolution through the centuries.

We had presentation from our fellow Nicola Carboni, on ontologies and metadata schemes, in particular focusing on the definition of intangible heritage and later on during the same day George Bruseker introduced the CIDOC-CRM explaining how we could use this information standard to describe formally and connect the information we have concerning a certain historical artefact or event. During the week was also presented a CIDOC-CRM board game, created by George Bruseker and Anais Guillelm, which made more engaging and practical the introduction to the standard. On the 3<sup>rd</sup> of December we had some other presentation from Dieter Fritsch, Rob Davies and Branka Cuca.

On the 4<sup>th</sup> of December I went again to the Church of Asinou to collect data accompanied by Nicola Carboni and Magda Ramos Calles and we had an enjoyable time in company of a local: the Church keeper Nicolas (See front page).

possibility to meet the people of the network, enjoy the wonderful Cyprus, strengthen our collaborations and plan new ones.

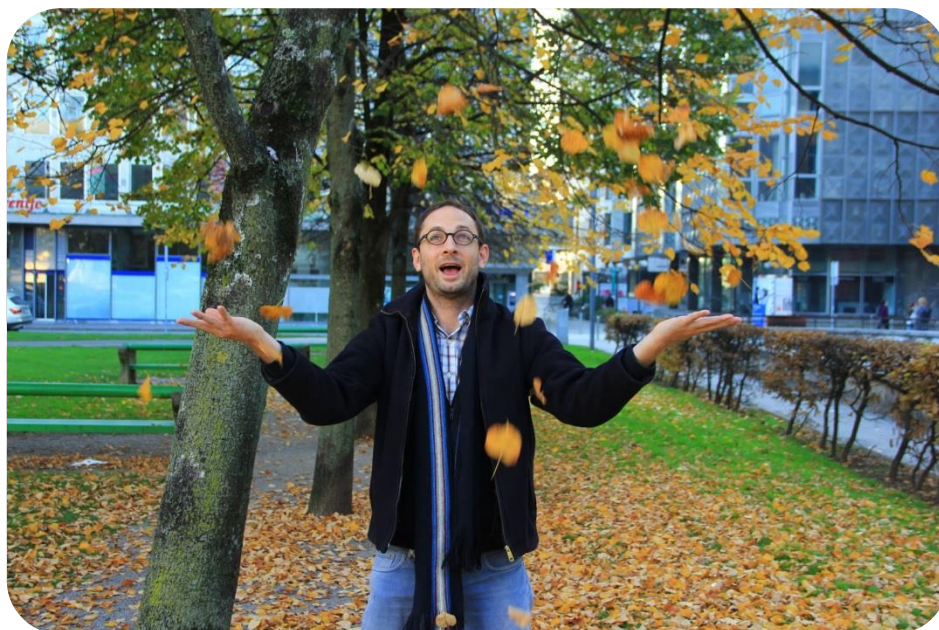
The workshop offered once again the



Figure 9 (From top left clockwise): Social dinner among all the fellows; Fellows playing CIDOC-CRM board game; 2 pictures of Marinos Ioannides and the fellows @ Asinou Pictures courtesy of Anais Guillelm

# What else's after ITN-DCH?

By George Bruseker, ER 1



After an intense fifteen months with ITN-DCH as ER1 working at ICS-FORTH on the subject of semantically representing three and four dimensional models of CH, the last days of my fellowship in the network are upon me. As such, it seems an appropriate time to reflect back upon the experiences and moments that ITN-DCH afforded me and to think about the opportunities that such a fellowship give moving forward.

My first encounter with the ITN-DCH would be in Stuttgart in October of 2014. The first summer school of the network was a whirlwind of meetings as much with people and ideas as with techniques, technologies and theories. Marinos Ioannides, project coordinator, issued one of his many memorable phrases at that time when he admonished us to look around the room and to know that from then onwards we would share an intense common intellectual and personal path with our co-fellows. His prognostication turned out to be true.

The last fifteen months in the ITN project have afforded me an amazing opportunity to be able to work with outstanding institutions and professionals in the fields of cultural heritage and information sciences, in the research, academic and private sectors across Europe. At my host institution, I had the rare privilege to work closely with and learn from my supervisor Martin Doerr and the whole team at ICS-FORTH. ITN-DCH, on the other hand, provided me with the infrastructure and funding to engage in a series of enriching secondments and workshops that brought me into contact with a wide range of scholars and researchers, opening up new paths of discussion and investigation.

The topic of my fellowship as ER1 was on the application of semantics and ontology to the three and four dimensional products of the cutting edge digitizations being researched and produced in the ITN-DCH network. It was truly thanks to the unique environment

provided by the ITN-DCH program that I was able to pursue a series of interdisciplinary dialogues with fellows and researchers in the network to take up this challenge and begin to elaborate a series of potential answers to the questions raised by these new technologies and approaches.

The secondment of Anais Guillem (ESR-6, UL-FGG), Nicola Carboni (ESR-8, CNRS-MAP) and Matthew Vincent (ESR-11, UM) in the first month of my fellowship at FORTH, started up what, for me, would be a crucial dialogue on the nature of virtual reconstruction and the reasoning standing behind it. Particularly, a conversation between scholars with backgrounds in architecture, library sciences and philosophy quickly proved a useful and productive combination. The resulting discussion resulted in the co-written submissions of both a theoretical paper presenting a VR argumentation model to the CIPA 2015 conference and a follow-up paper looking at the feasibility of implementing such a model in the popular CMS Drupal, which was submitted at the Digital Heritage 2015 conference. Working on and presenting these papers, in Taipei, Taiwan and Granada, Spain was a research and networking activity that could not have been achieved with the catalyzing facility of the ITN-DCH network.

The secondments envisioned in my fellowship sent me to work and learn at locations around Europe: Bonn (Germany), Marseille (France) and Ljubljana (Slovenia).

In February of 2015, I spent a month working with archaeologists handling complex datasets and 3D objects at DAI-KAAK, collaborating particularly with Jennifer von Schwerin and her team, especially Laura Stelson, in understanding their process and how it could be modelled with CIDOC-CRM and its argumentation extension CRMInf. This work led to a collaboration on the documentation particularly of iconographic data in which we built a CRM based

prototype database, with the help of Mark Fichtner of the Wiscki project, for documenting iconography using the Wiscki system (<http://wiss-ki.eu/>). This work was presented at European Maya Conference, 2015.

In May, I was hosted by CNRS-MAP, Livio de Luca and his fellow Nicola Carboni, as part of the group of fellows who were introduced to the visualization and representation technology and methodologies being pioneered by their lab. This led to a difficult and fascinating conversation on the documentation of perspective in photographic activities. Aspects of this conversation played no small part in helping set up theoretical foundations for a contribution to a paper on digitization documentation protocols proposed and accepted for ISPRS 2016.

Finally, in November, I had the chance to be hosted by University of Ljubljana, Roko

Zarnic and his fellow Anais Guillem, where we took up the topics of documentation of built cultural heritage, the representation of architectural knowledge in formal ontology, the challenge of building new techniques for teaching practical application of formal ontology, and brought together the secondment experiences of Anais Guillem at Arctron with the work carried out during the CNRS-MAP secondment, in order to research together with a wide cross section of fellows a collective paper on documentation protocols for 3D digitization as mentioned above. The work on representation of architecture led to a visit to the PIN lab with Paola Ronzino where we developed a perspective on and submitted a paper on the idea of how to document BCH from an architectural perspective using CIDOC-CRM and FRBRoo.

Individually, in groups and collectively, the last year gave me the chance to cross paths with an extremely talented, patient and

dynamic group of scholars who irrevocably enriched my knowledge and skills in digital cultural heritage. The outcome of this the intellectual level, it has led me to open up a series of new questions and research potential answers with co-fellows, resulting in valuable publication and conference presentation opportunities. On the personal level, it has led to the cementing of genuine friendships and camaraderie with a group of talented individuals as well as giving me the chance to set up base in beautiful Crete, Greece.

As I finish up my fellowship, I will be able to carry on and move in new directions of research with my host institution FORTH and look forward to collaborating with the colleagues and friends I have made through this fellowship long into the future. It has been a privilege to receive the support of this Marie Curie, European funded project, to take my career in a new direction here in the European Union. Such projects underline the benefits of mobility and open borders for

*Figure 11 George Bruseker during his experience in ITN-DCH (From left top clockwise): Data Capturing @Stuttgart; Dinner with other fellows @ Digital Heritage, Granada; George wearing a toga @ Carnuntum Workshop; George discussing with Prof. A. Georgopoulos @Digital Heritage, Granada; Group photo @ CIPA, Taipei.*  
Pictures courtesy of Anais Guillem





development and understanding.

## Forthcoming events & meetings

### 29<sup>th</sup> International Conference on Computer Animation and Social Agents, CASA'16 23<sup>rd</sup>-25<sup>th</sup> May, Geneva

The 29th International Conference on Computer Animation and Social Agents (CASA 2016) will be held at University of Geneva, on the beautiful BIOTECH Campus on May 23-25, 2016.

The conference is organized by [MIRALab](#), University of Geneva in cooperation with ACM-SIGGRAPH and The Eurographics Association.

CASA is the oldest international conference in computer animation and social agents in the world. It was founded in Geneva in 1988 under the name of Computer Animation (CA).

CASA 2016 will provide a great opportunity to interact with leading experts, share your own work, and educate yourself through exposure to the research of your peers from around the world.

On Monday the 23<sup>rd</sup>, there will be a few workshops and tutorials organized in parallel to the conference. The ITN-DCH event will take place in the morning from 9 to 12.

<http://casa2016.miralab.ch/index.html>

### 2nd International Conference on Science and Engineering in Arts, Heritage, and Archaeology (SEAHA), University of Oxford, 20<sup>th</sup> - 21<sup>st</sup> of June 2016, Oxford, UK

The EPSRC Centre for Doctoral Training in Science and Engineering in Arts, Heritage and Archaeology (SEAHA) is an 8-year initiative (2014-2022) to establish an infrastructure meet challenges set by the heritage sector, industry and government.

An international conference on heritage science, emerging techniques, innovative research and best practice for the conservation, interpretation and management of cultural heritage. **Heritage science** is a cross-disciplinary field connecting science and the humanities and the conference will provide a platform for the gathering and engaging of scientists, engineers, professionals, entrepreneurs, and policy-makers, to discuss innovative research being conducted in the field.

Some of the ITN-DCH fellows will actively participate with podium presentations and posters.

<http://www.seaha-cdt.ac.uk/seaha-conference-2016/>

## CGI'16: 33rd Computer Graphics International conference, 28<sup>th</sup> of June - 1<sup>st</sup> of July 2016, Heraklion, Crete, Greece.

Computer Graphics International is one of the oldest, international annual conferences in Computer Graphics and one of the most important ones worldwide. It is a yearly meeting where academics present their latest algorithms, models and technologies, and explore new trends and ideas.

The conference is organized by the ITN-DCH partner Institute of Computer Science of the Foundation for Research and Technology Hellas (ICS-CVRL/FORTH) in cooperation with ACM-SIGGRAPH and The Eurographics Association.

Several, important CGI-related events will be co-located this year with CGI'16:

- **CGI'16 Workshops & Tutorials:**
  1. CGI Workshop on Geometric Algebra in Computer Science and Engineering
  2. CGI Tutorial on Presence, Robotics and Human-Machine synergetic, social interaction
- **Summer School with the theme: "Cultural Heritage Simulations in Mixed Reality"**  
Jointly organized by Marie-Curie Initial Training Network on Digital Cultural Heritage (ITN-DCH) and Cost Action TD1406 Innovation in Intelligent Management of Heritage Buildings (i2MHB)
- **ITN-DCH Network meeting: Initial Training Network for Digital Cultural Heritage**

<http://www.ics.forth.gr/CGI2016/>

## Spectral Imaging Processing and Data Analytics for life quality improvement in public spaces, urban environments (SIPDA) held in conjunction with ACM PETRA conference, 29<sup>th</sup> of June - 1<sup>st</sup> of July 2016, Corfu, Greece

The PErsasive Technologies Related to Assistive Environments (PETRA) conference is a highly interdisciplinary conference that focuses on computational and engineering approaches to improve the quality of life and enhance human performance in a wide range of settings, in the workplace, at home, in public spaces, urban environments, and other. Outcomes of this conference have a broad impact in application areas that include, manufacturing, transportation, healthcare, energy systems, security and safety, robotics, biomedicine, environment and conservation, and many others

SIPDA is a workshop held in conjunction with PETRA to serve as an international forum for experts from both academia and industry to present their latest research findings, ideas, developments and applications in the wide area of vision systems & data analysis for non-conventional application scenarios that have been rarely surveyed in the literature, emphasizing in life quality improvement/support.

<http://www.petrae.org/workshops.html>

## International society for photogrammetry and remote sensing, 12<sup>th</sup>-19<sup>th</sup> July, Prague

ISPRS is a leading organization in remote sensing, photogrammetry and spatial information sciences - very high-resolution satellite imagery, terrain based imaging and participatory sensing, inexpensive platforms, and advanced information and communications technologies.

Every 4 years the Congress welcomes participants from all over the world. This gathering strengthens relations among the researchers, professionals and representatives of governmental and non-governmental organization thus enhancing the co-operation within the field. ISPRS welcomes all papers bringing new results, achievements, methods and theory to help to shift the present level of knowledge.

All interested organizations are welcome to participate at the Congress as exhibitors. Profit from the opportunity to present your products and services to the leaders in the field.

<http://www.isprs2016-prague.com/>

## ARQUEOLÓGICA 2.0 - 8th International Congress on Archaeology, Computer Graphics, Cultural Heritage and Innovation 5<sup>th</sup> - 7<sup>th</sup> of September, 2016 Vera Campus, Universitat Politècnica de València, Valencia, Spain

ARQUEOLÓGICA 2.0 – 2016 is a conference organised by the Spanish Society of Virtual Archaeology (SEAV), the Virtual Archaeology International Network (INNOVA), and the Universitat Politècnica de València in cooperation with CIPA Heritage Documentation.

Researchers, professors, archaeologists, architects, engineers, art historians from archaeology, computer graphics and geomatics dealing with cultural heritage are invited to share knowledge and experiences in the field of Virtual Archaeology.

Thematic areas will be:

- Data acquisition with metric, photogrammetric, remote sensing and geophysical devices
- Documentation of cultural heritage
- High-end digitisation and 3D modelling of objects, monuments and sites
- Virtual conservation/restoration
- Virtual archaeology
- Virtual architecture
- Virtual museums
- Virtual Exhibitions
- Cultural heritage gaming
- Collaborative environments for cultural heritage
- Internet technologies and social media in archaeology

<http://arqueologica8.webs.upv.es/>

## 14th EUROGRAPHICS Workshop on Graphics and Cultural Heritage, 5<sup>th</sup> -7<sup>th</sup> of October 2016, Genova, Italy

The 14th EUROGRAPHICS Workshop on Graphics and Cultural Heritage (GCH 2016) aims to foster an international dialogue between ICT experts and CH scientists to have a better understanding of the critical requirements for processing, managing, and delivering cultural information to a broader audience. The objective of the workshop is to present and showcase new developments within the overall process chain, from data acquisition, analysis and synthesis, 3D documentation, and data management, to new forms of interactive presentations and 3D printing solutions. Interdisciplinary approaches for analysis, classification and interpretation of cultural artefacts are particularly relevant to the event.

Specific sessions will be devoted to reports on applications, experiences and projects in this domain. Contributions are solicited (but not limited to) in the following areas:

- 2/3/4D data acquisition and processing in Cultural Heritage
- Multispectral imaging and data fusion
- Digital acquisition, representation and communication of intangible heritage
- Material acquisition analysis
- Heterogeneous data collection, integration and management
- 3D printing of cultural assets
- Shape analysis and interpretation
- Similarity and search of digital artefacts
- Visualization and Virtual Museums
- Multi-modal and interactive environments and applications for Cultural Heritage
- Spatial and mobile augmentation of physical collections with digital presentations
- Semantic-aware representation of digital artefacts (metadata, classification schemes, annotation)
- Digital libraries and archiving of 3D documents
- Standards and documentation
- Serious games in Cultural Heritage
- Storytelling and design of heritage communications
- Tools for education and training in Cultural Heritage
- Experiences and projects in Computer Graphics and CH documentation, conservation and dissemination

<http://gch2016.ge.imati.cnr.it/>

## EuroMed2016, October 31st - November 5th, 2016, Cyprus

The 6<sup>th</sup> EuroMed2016 brings together researchers, policy makers, professionals and practitioners to explore some of the more pressing issues concerning cultural heritage today. In particular, the main goal of the conference is to focus on interdisciplinary and multi-disciplinary research on the holistic documentation of tangible and intangible Cultural Heritage, the use of cutting edge technologies for the protection, restoration, preservation, massive digitalization and presentation of the CH content. The event will also cover topics of research ready for exploitation, demonstrating the acceptability of new sustainable approaches and new technologies by the user community, SME's, owners, managers and conservators of cultural patrimony.

[www.euromed2016.eu](http://www.euromed2016.eu)

# ITN-DCH Newsletter

The “**Initial Training Network for Digital Cultural Heritage: Projecting our Past to the Future**” (ITN-DCH) is a **Marie Curie fellowship projects** in the area of the e-documentation / e-preservation and CH protection funded by the European Union under the FP7 PEOPLE research framework. The Project started on the 1st of October 2013, its consortium comprises **14 full partners and 9 associate members** covering the entire spectrum of European CH actors, ranging from academia, research institutions, industry, museums, archives and libraries. The project aims to train **20 fellows** in the area of CH digital documentation, preservation and protection in order to create them a strong academic profile and market-oriented skills which will significantly contribute to their career prospects. ITN-DCH targets **all aspects of CH** ranging from tangible (e.g. books, newspapers, images, drawings, manuscripts, uniforms, maps, artefacts, archaeological sites, monuments) to intangible content (e.g., music, performing arts, folklore, theatrical performances) and their inter-relationships.

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Credits:

Thanks to all the people that have contributed to this edition of the ITN-DCH newsletter in particular:

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