Nexus 2016: Relationships Between Architecture and Mathematics

The 11th international, interdisciplinary Nexus conference for architecture and mathematics will take place 6-9 June 2016 in Donostia-San Sebastián, Spain, hosted by E.T.S. Arquitectura UPV/EHU and Kim Williams Books.

This important meeting is the eleventh conference in the Nexus series, following those in 1996 (Fucecchio, Florence, Italy), 1998 (Mantua, Italy), 2000 (Ferrara, Italy), 2002 (Óbidos, Portugal), 2004 (Mexico City), 2006 (Genoa, Italy), 2008 (San Diego, USA), 2010 (Porto, Portugal), 2012 (Milan, Italy) and 2014 (Ankara, Turkey).

The Nexus conferences are dedicated to explorations of the relationships between architecture and mathematics, through a broad panorama of topics. In the past, these topics have included: symmetry in architecture, projective and descriptive geometry, soap bubbles and minimum surfaces, systems of proportions, geometry and urban design, the development of structural forms, the use of arithmetical, geometrical, and harmonic means, calculations of domes and arches, linear algebra and geometric forms, music theory and architecture, fractals in architecture, etc. Presentations have also included discussions of the work of individual architects, such as Alberti, Palladio, Frank Lloyd Wright; historical periods, such as Roman, Incan and Renaissance; the application of particular branches of mathematics to architectural design, such as geometry, topology and algebra.

SELECTION PROCESS
Speakers at the Nexus 2016 conference will be selected on the basis of abstracts submitted in response to this call for proposals. Abstracts will be selected on the basis of originality of research and clarity of presentations. Abstracts will NOT be selected on the basis of beauty of presentation, so submitters should focus on content, not form.

Accepted abstracts will be published in a special volume of “Nexus 2016 Abstracts”, which will be presented at the conference. A selection of those presentations at the conference will be invited to develop their work into full research papers for publication in the Nexus Network Journal. The selection of papers to publish will be made by the Scientific Committee on the basis of the presentations. Authors whose abstracts are accepted but who do not attend the conference to present their work will not be invited to publish in the journal.

WHAT TO SUBMIT
- **Cover sheet.** Please include a cover sheet with the following information: name, title or profession and affiliation (if applicable), mailing address, e-mail address, title of proposed presentation; category of research (see below), 5 keywords.
- **Abstract.** Abstracts in English, no more than 1600 words and 2 pages of images. The abstract should be comprise the following sections: Introduction (ca. 150 words); The Research (ca. 1300 words); The Results...
words); Conclusion (ca. 150 words); References (no more than 10). (Before publication, the authors of abstracts selected for the conference will be asked to format them according to a model that will be provided.)

• Curriculum vitae. BE BRIEF: no more than 1 page, including recent publications;

WHERE TO SUBMIT

Submissions are to be sent via e-mail to the Secretary of the Scientific Committee, Sylvie Duvernoy, at this address <nexus2016@kimwilliamsbooks.com>.

WHEN TO SUBMIT

Submissions will be accepted from 1 September 2015 to 1 October 2015. No abstracts will be acknowledged before 1 September or accepted after 1 October.

SPECIAL NOTE FOR PH.D. CANDIDATES AND RECENT PH.D. GRADUATES:
If you are currently enrolled in a Ph.D. program or have received your Ph.D. within the two years before the conference (2014-2016), please see the CALL FOR PAPERS FOR THE NEXUS 2016 PH.D. DAY. Papers submitted by Ph.D. students will not be selected for plenary presentations at Nexus 2016, but will be considered for the “Nexus 2016 Ph.D. Day”.

The following conditions apply:

• Proposals will be evaluated in terms of pertinence to the conference theme and clarity of the presentation.
• Submission of a proposal is not a guarantee of acceptance at the conference or of publication in the Nexus Network Journal.
• Papers that have been previously published or presented at other meetings will not be considered.
• Abstracts accepted for publication at the conference will be published in a special volume to be presented at the time of the conference.
• A selection of the papers presented at the conference will be published in a future issue of the Nexus Network Journal.
• Attendance at the conference is a requisite for selection of the presentation of the paper in the Nexus Network Journal: authors must attend in person.
• Speakers chosen for the conference must cover their own travel expenses to the conference venue. There will be a discounted conference fee for speakers.

CATEGORIES:
The following categories of research are intended to facilitate the work of the Scientific Committee. Please indicate the category that you believe best describes your research:

Design theory: mathematics as a design tool; proportions, symbolism
Design analysis: mathematics used to analyse an existing monument or site
Geometry: Applications of geometry to architecture, including fractals
Rule-based Design: Shape grammars; parametric design
Representation of architecture: perspective; modelling
Structures: architectural engineering application
Computer applications: morphogenesis, digital fabrication, virtual reality
Didactics: methods and approaches in the classroom
Other: topology; music and architecture; bio-architecture

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6-9 June 2016, Donostia-San Sebastián, Spain

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CONFERENCE WORKING SCHEDULE

The schedule for submissions, selections, and the preparation of the final presentations is:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>1 October 2015</td>
<td>Deadline for submission of abstracts</td>
</tr>
<tr>
<td>1 December 2015</td>
<td>Notification of acceptance of abstracts.</td>
</tr>
<tr>
<td>30 May 2015</td>
<td>Publication of “Nexus 2016 Abstracts” in a special volume</td>
</tr>
<tr>
<td>6-9 June 2016</td>
<td>Nexus 2016 conference</td>
</tr>
<tr>
<td>1 October 2016</td>
<td>Deadline for submission of final papers selected for publication</td>
</tr>
<tr>
<td>2017</td>
<td>Publication of selected papers in the <em>Nexus Network Journal</em> vol. 19</td>
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If you would like to know more about the Nexus conferences, books or the *Nexus Network Journal*, or you have questions about the call for proposals, please don’t hesitate to contact a member of the Scientific Committee.

Conference Directors:

- **Kim Williams**
  Editor in Chief
  *Nexus Network Journal*
  kwb@kimwilliamsbooks.com

- **Javier Barrallo**
  School of Architecture
  The University of the Basque Country
  mapbacaj@ehu.es

Scientific Committee:

- **Secretary:**
  Sylvie Duvernoy
  Università degli Studi di Firenze / Politecnico di Milano
  syld@kimwilliamsbooks.com

- **Ahmed Elkahateeb**
  King Abdulaziz University
  Department of Architecture
  Faculty of Environmental Design
  Jeddah, Saudi Arabia
  aelkhateeb@kau.edu.sa

- **Marco Giorgio Bevilacqua**
  DESTEC Dipartimento di Ingegneria dell'Energia, dei Sistemi, del Territorio e delle Costruzioni
  Università di Pisa
  mg.bevilacqua@ing.unipi.it

- **Arzu Gönenc-Sorguç**
  Department of Architecture
  Middle East Technical University
  arzug@metu.edu.tr

- **Cornelia Leopold**
  Fachbereich Architektur
  TU Kaiserslautern
  Kaiserslautern, Germany
  cornelic.leopold@architektur.uni-kl.de

- **Michael Ostwald**
  School of Architecture and Built Environment
  University of Newcastle, Australia
  Michael.Ostwald@newcastle.edu.au

- **João Pedro Xavier**
  Faculty of Architecture and Urban Planning
  University of Porto
  jxavier@arq.up.pt

- **Kenza Boussora**
  Laboratoire Ville, Architecture et Patrimoine
  Ecole Polytechnique d’Architecture et d’Urbanisme
  Alger, Algeria
  boussora@hotmail.com

- **Santiago Huerta**
  Universidad Politecnica de Madrid
  E.T.S. de Arquitectura
  santiago.huerta@upm.es

- **Marina Zack**
  Mathematical, Information and Computer Sciences
  Point Loma Nazarene University
  San Diego, CA, USA
  MariaZack@pointloma.edu