

# Call for Papers



## Nexus 2012

Monday 11-Thursday 14 June 2012

Milan, Italy

with the sponsorship of

Department of Industrial Design, Art, Communication  
and Fashion (INDACO)  
and

Department of Mathematics  
Politecnico di Milano

## PRESENTATION

The IX international, interdisciplinary Nexus conference for architecture and mathematics will take place 11-14 June 2012 in **Milan, Italy**, hosted by the Department of Industrial Design, Art, Communication and Fashion (INDACO) and the Department of Mathematics of the Politecnico di Milano.

This is the ninth 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) and **2010** (Porto, Portugal). The papers from the conference will be published in future issues of the *Nexus Network Journal*.

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.

## Call for Papers

For the 2012 edition of Nexus we particularly encourage submissions on the following topics:

- Architecture and Mathematics
- Mathematics and design (formal design, development and representation of complex surfaces, etc.)
- Architecture and music
- Architecture and astronomy / archaeoastronomy
- Mathematics and urban design and planning
- Mathematics and configuration (geometric models for designing)

## SUBMISSION OF ABSTRACTS

- **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 paper, a brief description of the proposed presentation;
- **Abstract.** Abstracts in English, no more than 500 words (an A4 or 8 1/2 x 11 page);
- **Curriculum vitae.** No more than 1 page, including recent publications;
- Submissions are to be sent via e-mail to Kim Williams <kwb@kimwilliamsbooks.com>.

## SELECTION PROCESS

In order to assure the highest academic quality, the selection process for papers for presentation at the conference is divided into two phases. The first phase is the review and selection of **ABSTRACTS**. Authors whose abstracts are selected will be asked to complete their research by the date in the schedule below. The completed research will undergo a final double-blind peer-review process in order to select the presentations for the conference. Research not selected for presentation at the Nexus 2012 conference will be considered for publication in the *Nexus Network Journal*.

- Paper proposals will be evaluated in terms of pertinence to the topic and quality of the presentation. Papers that have been previously published or presented in public will not be considered.
- Papers presented at the conference will be published in the *Nexus Network Journal*.
- Submission of a proposal is not a guarantee of acceptance at the conference or of publication in the *Nexus Network Journal*.
- Speakers chosen for the conference must cover their own travel expenses to the conference venue. There will be a minimal conference fee for speakers.

## CONFERENCE WORKING SCHEDULE

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

<b>15 February 2011</b>	Deadline for submission of <b>abstracts</b>
<b>1 April 2011</b>	Notification of acceptance of abstracts.
<b>1 November 2011</b>	Deadline for submission of <b>complete paper</b> for final selection
<b>1 December 2011</b>	Notification of acceptance for conference presentation
<b>11-14 June 2012</b>	Nexus 2012 conference
<b>1 September 2012</b>	Deadline for submission of final papers for publication
<b>2013</b>	Publication of papers in the <i>Nexus Network Journal</i> vol. 15

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 a member of the Scientific Committee.

### Scientific Committee:

<b>Franca Calìò</b> Department of Mathematics Politecnico di Milano franca.calio@polimi.it	<b>Sylvie Duvernoy</b> Department of Architecture University of Ferrara syld@kimwilliamsbooks.com	<b>Giulio Magli</b> Department of Mathematics Politecnico di Milano giulio.magli@polimi.it
<b>Elena Marchetti</b> Department of Mathematics Politecnico di Milano elena.marchetti@polimi.it	<b>Michela Rossi</b> Department of Industrial Design, Art, Communication and Fashion Politecnico di Milano michela.rossi@polimi.it	<b>Rossella Salerno</b> Department of Architecture and Planning Politecnico di Milano rossella.salerno@polimi.it
<b>Vasco Zara</b> Centre d'Etudes Supérieures de la Renaissance Université François-Rabelais Tours vasco.zara@univ-tours.fr		<b>Kim Williams</b> Editor in Chief <i>Nexus Network Journal</i> kwb@kimwilliamsbooks.com



Nexus 2012: Relationships between Architecture and Mathematics  
11-14 June 2012, Milan