Who’s next BEST Scholarship

“Seven years ago I was in California with BEST Scholarship and now I’m part of Decisyon. If you decide to participate to BEST Scholarship, I guarantee your lives will be changed forever”.

Cosimo Palmisano has talked about his personal experience in Silicon Valley during “Startups for innovation”, an event organized by the PhD School, the BEST Scholarships Program, and Polihub, last February 21st. Decisyon is an Italian company which raised the largest startup funding rounds from an American Fund over the last 14 years.

The “Startups for innovation” event has been an occasion to present BEST Scholarship, whose mission is to foster the entrepreneurial high-tech culture, by transferring best US business practices in Italy. The selected candidates (the target are Master students, PhD candidates and young under-35 Italian researchers) will attend 3-month classes in Santa Clara University and will work in a startup in Silicon Valley. For more information visit www.bestprogram.it, and submit the application before March 30th.

The event strongly focused on the collaborations between universities and companies. Enrico Cereda, CEO of IBM Italia, spoke about future trends on which startups shall concentrate their efforts: “We support research and innovation with 6 billion euros every year. The emerging trends are: health care and cyber security”. Carlo Pignoloni, Head Italy & Europe at ENEL remarked that the company opened an Innovation Hub to work with startups: “We strongly believe in collaborations with the best startups. For this reason, we’ve chosen to launch our first startup accelerator in Tel Aviv, one of the countries with the highest rate of innovation in the world”.

“To boost technology transfer processes, Politecnico di Milano created PoliHub” added Donatella Sciuto, Prorettore Vicario. PoliHub (previously known as Acceleratore d’Impresa) was founded in 2000 and has collected 9000 ideas and supported 390 projects in the startup phase so far. PoliHub is now hosting 100 companies (35 Acceleration, 45 Startups, 20 District), and in 2015 has been awarded by Ubi Global as the world’s fifth best university incubator, second in Europe.

The time has come for new skills, knowledge and abilities.

Emanuela Murari, Journalist – Press Office Manager, PoliHub
Calls and events

**Matlab® Associate Certification**
The PhD School of Politecnico di Milano will host the test to achieve the Matlab® Associate Certification, the first step in the MATLAB® certification track, at Bovisa Campus (see below). Interested Candidates are invited to register by filling in and submitting this online form: **Only the first 20 registrations will be accepted** and required to pay the registration fee (discounted prize: EUR 100 + 22% VAT = 122 EUR) within a week after the registration acceptance. Late registrations will be placed in a preferential waiting list for forthcoming editions of the test. The Matlab® Associate Certification is a multiple-choice questions exam (see [here](#) for further details and examples). To prepare for the test, candidates are strongly invited to follow the Matlab Fundamentals online course, freely available from the Matlab Academy platform.

April 6th, 2017 – 16h30, Bovisa Campus, Building B7 (Design Dept.), Room CS.0.2.

**ABB PoliMI Day**

ABB meets Politecnico di Milano faculty and PhD Candidates to provide them an opportunity for visualizing their most recent technological developments, and developed solutions to a wide series of application, in, Dalmine (BG), in the ABB plant. A series of parallel presentations will target to: Product Development Management, Lean Production and Industry 4.0, Smart Grid and Components for Electrical Networks. Due to a limited number of places, it is necessary to register [here](#), and wait for the registration confirmation.

Friday March 3rd, 2017 - ABB plant in Dalmine (BG)

**Cassini Call 2017 – French-Italian Study-Days**
The French Embassy in Italy has issued a call for PhD candidates from Italian Universities with the aim of supporting the organization of Italian-French Study-Days and to nurture the relationship between young Italian researchers and French Research Centers and Universities. These Study-Days proposals must involve at least 2 PhD candidates/researchers/Professors from French Universities or Research Centres and must be organized by their Educational Institute, in coordination with their PhD Programme. The selected projects will receive funding of **1000 euro** from the French Embassy to support the organization of the study days.

Call deadline: 15th April 2017

**Agile for Innovation**
For the fourth year, the “Agile for Innovation - Una trasformazione per far crescere il valore di business” event will be held at DEIB on March 2nd, 2017. The event aims at exploring the opportunities for agile approaches in the context of ICT strongly innovation-oriented business environments. The companies are witnessing a continuous increase in the level of complexity in the management of their initiatives, particularly in the world of high tech. Through the participation of national and international well-known experts, the participants will be in contact with specific tools that can be applied within their own business reality in the short term and that will strongly support them in the management of innovative activities to address effectively the complexity, analyzing it thoroughly and identifying the most appropriate strategies to handle, remove and / or reduce it.

A keynote speech by Dave Snowden is expected.

March 2nd, 2017 (DEIB)
Seminars

FAILURE ANALYSIS IN THIN WALLED STRUCTURES: SMEARED-BASED CRACK AND DELAMINATION MODELS
Prof. José Antonio Reinoso Cuevas
The seminar analyses the failure in shells using novel smeared damage modelling strategies.
9th March, 12:30 (Aula Beltrami, Building 5 – ground floor)

DURABILITY OF PHOTOVOLTAIC MODULES: MODELLING, SIMULATION AND EXPERIMENTS
Prof. Marco Paggi
The seminar provides experimental evidence of degradation phenomena, alongside with mathematical models and computational methods for their simulation and understanding.
9th March, 14:30 (Aula Beltrami, Building 5 – ground floor)

STRUCTURAL HEALTH MONITORING OF BRIDGES: OLD AND NEW TECHNIQUES
Prof. Joan Ramon Casas Rius
SHM is of paramount interest for the assessment and maintenance of structures and bridges. The seminar focuses on two SHM techniques.
31st March, 10:30 (Aula Rossa, Building 4A – ground floor)

FAILURE ANALYSIS OF POLYCRYSTALLINE SILICON SOLAR CELLS CONSIDERING THE EFFECT OF RESIDUAL STRESSES
Dr. Eelco Jansen
The seminar provides an insight into the work and research carried out by Dr. Eelco Jansen, head of the Section ‘Composites’ at the Institute of Structural Analysis of Leibniz University Hannover.
9th March, 15:30 (Aula Beltrami, Building 5 – ground floor)

MILANO DESIGN PHD FESTIVAL
Prof. Luca Guerrini, Prof. Alessandro Biamonti
You can see: www.phdfestival.com
From 6th March 2017 to 10th March 2017

SCIENTIFIC SEMINARS
Prof. Luca Guerrini
"Borders may divide us, but, paradoxically, they’re also the places where we’re nearest to one another", Ken Jennings

DECODING BORDERS
The border represents a line dividing parts, a defined limit. According to the Oxford dictionary, ‘border’ is “the edge or boundary of something, or the part near it”. Being them physical or virtual, material or metaphoric, borders are liminal spaces where two or more parts meet each other. In this sense, a bordering line is a place where divisions become opportunities of encounter. This kind of duality is the topic of the seminar. According to this perspective, the seminar will propose different ways of decoding borders through research in design. We point out three ways of dealing with borders: extending, passing through and blurring. Each approach assumes borders are limits but can provide opportunities to foster a mutual exchange between the parts they divide.
6th March, 017
Starting courses – PhD School

A MULTIDISCIPLINARY PERSPECTIVE ON BIG DATA
Prof. Emanuele Della Valle
The term Big Data refers to a growing torrent of information that, if successfully analyzed, can unleash new business opportunities and revenues. This course aims at introducing Big Data analytics methods and includes practical sessions on PoliMi’s Big Data computational infrastructure.
1st March 2017

COMMUNICATING SCIENTIFIC RESEARCH
Prof. Anna Maria Paganoni
The principal aim of the course is to promote and spread the scientific culture in a broad sense, emphasizing its connection with other disciplines. In particular we’d take advantage of the great experience grown at "Laboratorio di Formazione Matematica e di Sperimentazione Scientific" (Mathematics Department- Politecnico) and of the strengthened collaboration between the Piccolo Teatro di Milano and the Politecnico.
15th March 2017

LASER INTERFEROMETRY AND OPTICAL METROLOGY
Prof. Cesare Svelto
Provide the students with a deep knowledge about LASER interferometry, precision phase-sensitive optical measurement, Metrology and standards at the optical wavelengths (for the international scientific community and for the industry).
21st March 2017

RESEARCH SKILLS
Organized by the Research Service of Politecnico di Milano
This course deals with the basic skills for a career in research (communication, research management, the preparation of a research proposal, public speaking, ...); it offers a wide range of 1-day workshops focused on a single topic, from January to September 2017. Candidates are requested to attend at least 5 of the offered modules, to gain the course credits. The detailed list of topics will be published here, with the dates of each meeting.
The next two workshops, with the Facilitators: Dr P. Sheard & C. Gavaud, are the following:

PRESENTING FOR IMPACT
The Presenting for Impact course is the third and penultimate session of the four-module training programme prepared and delivered by Trend 2000 Ltd to the students of the Politecnico di Milano Doctorate School to help them develop basic persuasion and communication skills. Participants will be asked to leverage what they learnt during modules# 1 & 2 (“Better Business Writing” and “Persuasive Writing”) and apply the learning to their own research. Essentials of oral and written communications of a research project, its leader, its objectives, risks and potential for exploitation and dissemination will be explored through action learning (highly interactive sessions). Each session can draw up to 20 students (see also the agenda). Interested candidates are kindly requested to register by filling in and submitting the form, here.
March 1st 2017, 8:30-17 @ Campus Leonardo, Building #6, Natta Conference Room

SUCCESSFUL HORIZON 2020 PROPOSALS
The Successful Horizon 2020 proposals course is the fourth and final session of the four-module training programme prepared and delivered by Trend 2000 Ltd to the students of the Politecnico di Milano Doctoral School to help them develop basic persuasion and communication skills. The final module focuses on applying the knowledge gained in previous sessions in presenting an innovative idea in the framework of the Horizon 2020 programme, a seven-year, €80 million-euro fund-
ing instrument for research, development and innovation. The event will help raise awareness and interest in H2020 programmes; start seeding for concept generation and good proposal writing skills; explain logic and expectations of R&D funder (emphasis on EC). There will be a specific focus on individual research projects. See also the agenda. All candidates interested in participating are kindly requested to register by filling in and submitting this form.

March 2nd 2017, 9-17 @ Campus Leonardo, Building #6, Natta Conference Room

The participation is open to all PhD candidates. Each participant is expected to come to the course with a research idea.

Starting courses – Doctoral Programmes

**PhD in Architecture, Built Environment and Construction Engineering**

**IT4PBABE: INFORMATION TECHNOLOGY FOR PLANNING, ARCHITECTURAL DESIGN AND BUILT ENVIRONMENT MANAGEMENT – 2nd EDITION**

Proff. G. Pelagatti, M. Mazuran

The course aims to provide some fundamental notions of Information Technology with a particular focus on Computer Programming and Data Modelling and to show their application in the fields of Building Information Modelling (BIM) and Geographical Information Systems (GIS). It is targeted to develop the capability to write general Python scripts; moreover, the access of SQL Databases and the manipulation of Industry Foundation Classes (IFC) files through Python scripts is covered.

The course aims to face two questions: “What is research in architecture?” and “What future for which past?” through the exam of a series of exemplary projects, that “pushed forward” technical solutions, spatial frameworks and expressive forms, showing the contribution of diverse expertise and approaches.

The course will start on March 13th 2017

**PhD in Design**

**DESIGN FOR SOCIAL INNOVATION**

Prof. Davide Fassi

Goal of the course is forming an opinion in and activating the critical reflection of the participants about Social Innovation and its recognised potential to transform the society as a whole, by presenting and debating the most contemporary theories, cases studies, research projects and emerging issues related to the subject. The course will investigate, from different perspectives, the multifaceted phenomenon of Social Innovation (SI). For doing this, it will leverage on the scientific knowledge developed by the international DESIS-Design for Social Innovation and Sustainability Network, an Association founded and coordinated by Politecnico di Milano.

From 29/03/2017 to 21/04/2017

**PhD in Energy and Nuclear Science and Technology**

**THERMAL ANALYSIS OF BUILDINGS**

Prof. Livio Mazzarella

The course deals with the modeling of buildings, building components and plants, in terms of mass and energy processes. Main topics are the thermal energy and mass transfer throughout and between building components, the energy balances of the building systems and their numerical modeling. The specific items treated during the course will be adjusted year by year according to the interests of the students.

March 10th, 2017
PhD in **Environmental and Infrastructure Engineering**

**DIALECTICAL CRITIQUE OF DATA PROCESSING**

Prof. Luigi Mussio

The course deals with Descriptive Statistics and Inference application: Models and their selection in Estimation Theory, Tests and cases of Statistical Inference, Potentialities and limits of Data, Model Validation, and Multivariate Analysis, Time Dependence of geometric, environmental and human measures, the Scale and Texture in time measurements and spatial representations, the Correlations in the Observations and/or Parameters of Fields, Patterns and Networks. The course will present some examples of applications in Geodesy and Geomatics and (if possible) topics related to Candidates’ research ones.

March 22\(^{\text{nd}}\), 2017

**PhD in Physics**

**OPTICAL PROPERTIES OF LOW-DIMENSIONAL MATERIALS**

Prof. Francesco Scotognella

We will describe the optical properties of semiconductor nanocrystals, carbon based nanostructures and two-dimensional materials.

March 9\(^{\text{th}}\), 2:30 pm

**Colloquium Doctoralia**

**COLLOQUIUM DOCTORALIA PHD ISSG – IV, V, VI SESSION 2017**

PhD candidates of the 29\(^{\text{o}}\) Cycle: Mr Ramin Mirzazadeh, Ms Mariagrazia Bellanova, Ms Deborah Briccola.

March 9\(^{\text{th}}\) – 23\(^{\text{rd}}\) – 30\(^{\text{th}}\) (Aula Beltrami, Building 5 – ground floor)

**COLLOQUIUM DOCTORALIA ABCPhD – 1\(^{\text{st}}\) SESSION 2017**

The following ABC-PhD Candidates will defend their thesis:

- **COMMISSIONE ABCPhD 2017-1 – MODELLING OF MASONRY STRUCTURES**
  March 24\(^{\text{th}}\) - 10:00 - *Commission Members*: Antonio M. Tralli (UniFE), Michal Sejnoha, Czech Technical University (RG); Siro Casolo (DABC). *Candidate*: Elisa Bertolesi (rel. G. Milani, corr. C. Poggi)

- **COMMISSIONE ABCPhD 2017-5 - ENERGY EFFICIENCY AND BUILDING TECHNOLOGIES**

- **COMMISSIONE ABCPhD 2017-6 - SEISMIC VUNERABILITY**
  March 27\(^{\text{th}}\) - 14:30 - *Commission Members*: Felice Ponzo (Univ. Basilicata), Benno Hoffmeister (RWTH Aachen), Carlo Castiglioni (DABC). *Candidates*: Emanuele Gandelli (rel. V. Quaglini, corr. P. Limongelli) Alper Kanyilmaz (rel. C. Castiglioni)

- **COMMISSIONE ABCPhD 2017-2 - IT4ARCHEOLOGY**
  March 28\(^{\text{th}}\) - 10:00 - *Commission Members*: Philippe Pergola (PIAC), Olof Brandt (PIAC), Raffaella Brumana (DABC), Valeria Pracchi (DABC). *Candidate*: Riccardo Valente (rel. R. Brumana)

- **COMMISSIONE ABCPhD 2017-4 - ENERGY AND ARCHITECTURE 1**
  March 29\(^{\text{th}}\) – 10:00 - *Commission Members*: Federico Butera (ex-DABC); Valerio Lo Brano (UniPA); Niccolò Aste (DABC). *Candidate*: Giorgia Marenzi (rel. M. Manfren)

- **COMMISSIONE ABCPhD 2017-8 - ENERGY AND ARCHITECTURE 2**
  March 30\(^{\text{th}}\) – 10:00 - *Commission Members*: Praveen Maghelal (Masdar Institute); Afshin Afshari - (Masdar Institute); Tiziana Poli (DABC). *Candidate*: Lindita Bande (rel. P. Ronca, corr. R. Paolini)

- **COMMISSIONE ABCPhD 2017-9 - CONSTRUCTION INDUSTRY**
  March 30\(^{\text{th}}\) - 14:30 - *Commission Members*: Arto Kiviniemi (Liverpool Univ.), A. Carbonari (Univ. politecnica delle Marche), Angelo Ciribini - (UniBS). *Candidate*: Manuele Cassano (rel. M. Trani)
COMMISSIONE ABCPhD 2017-3 - TECHNOLOGIES FOR ARCHITECTURAL DESIGN AND URBAN TRANSFORMATION
March 31st - 10h00 - Commission Members: Mario Losasso (Napoli Federico II), Maria T. Lucarelli, Univ. Mediterranea di RC, Elena Mussinelli (DABC). Candidates: Marta Ferretti (rel. M. Gambaro), Giovanni Castaldo (rel. F. Schiaffonati)

COMMISSIONE ABCPhD 2017-7 - HERITAGE TRANSFORMATION AND CONSERVATION
March 31st - 14h30 - Commission Members: Carlo Moccia (PoliBA), Bertrand Terlinden (Univ. Libre de Bruxelles); Adalberto Del Bo (DABC); Ludovico Micara and Simone Ricca (ext.experts). Candidate: Cecilia Fumagalli (rel. C.Pallini)

March 24th – 31st, Aula Consiglio Ed. 14 - I piano DABC)