OPEN, OPEN, OPEN? NO OBVIOUS NOR EASY ANSWERS!
by *Enrico De Angelis*

It is recent the news from Finland that *FinELib*, the National Library Services consortium (*Ministry of Education and Culture* supported), stopped providing a dozen of Finnish universities and research institutions access to Taylor and Francis' digital resources.
Taylor and Francis (*TANF*) is just one of publishers of scholarly journals, but one of the world's leader (>2.500 journals in all the main areas of Science, Technology, the Humanities, Social Sciences, Medicine etc.,) and, in any case, not the first publisher to be boycotted.
In the 2018 summer, the *Project DEAL*, headed by the German Rectors' Conference, stopped the talks with Elsevier (see here), started one year before to re-negotiate their E-journals portfolio licensing agreements. The Swedish *Bibsam Consortium* (National Library of Sweden) did the same, in May 2018, and so did the French *Couperin* (the consortium funded by the *Ministère de l'Enseignement Supérieur et de la Recherche*) broke-up in April.
The fight of *National Libraries* is not just for a discount from *Publishers*' excessive costs) or for a moral condemnation of their dominant market position and huge profits (higher than 30% of their revenue, from many sources): universities and researchers seek different communication and reviewing models of their scientific product, to access to articles for free, while to pay to publish and to be reviewed, in a gradual move toward the "gold open access" mode.
While the biggest *Publishers* still resist, about thirty years after the start of `arXiv.org` and fifteen after the Open Access (OA) movement was started, the share of Open research is constantly growing. On an estimate number of 67 million of existing journal articles in 2017, very few (12%) are officially "open", but a really higher share (28%) is free to read; and the choice of researchers is definitively Open: about 50% of the actually retrieved papers are OA papers and the "open access citation advantage" is evident (they seem to be more and more quoted than their toll-access counterparts; see this Open Access paper for details).

Moreover, public and charity research funders require Open Access, aiming at a wider share of the results of their investment: the US National Institutes of Health in 2008, the Bill and Melinda Gates in 2015 and the European Commission since 2016 are just few fundamental examples.

But, while the world seems definitely dreaming Open (Open innovation, open science, open to the world, by our European Ministry of Research, Carlos Moedas) and going Open, is that openness really for all? This is, in simple words, the question of Kieran Fenby-Hulse, a young expert in Early and Middle Career Development in the R&D field. To generate intellectual property and commercial applications is not a neglectable requirement by universities as employers and it is not obvious «when research should be closed and when it should be open; when it should be cooperative and collaborative and when it should be competitive and commercialized», in particular it is not for early-career researchers, often encouraged to protect, value and sell their research. «There are no obvious or easy answers. Some disciplines, such as engineering and biotechnology, face particularly complex issues».
Yes: Opening up research, requires a rethink of our impact and our agenda.

In any case, while the great questions connected with the future of Big Data and the regulation of their exploiting is under debate, keep on enjoying the great advantages that an, at least partial, open knowledge world is giving us.

For example, try OPEN CULTURE, starting from its list of Online Courses.
[see also a LITTLE PORTABLE TERMINOLOGY at the end of the newsletter …]

CALLS AND EVENTS

INTERDISCIPLINARY PHD GRANTS AT POLIMI

Starting 2017, Politecnico di Milano has financed 20+ PhD grants every year to support interdisciplinary PhD researches in one of the following five strategic Themes: Smart Cities, Industry 4.0, Cultural Heritage, Health, Natural Hazards. An overview of the first results attained through this initiative will be presented on Friday, February 22nd at the De Donato Conference Room (Campus Leonardo, Building #3).
Further details on the event, including the complete schedule and the registration link, will be soon announced

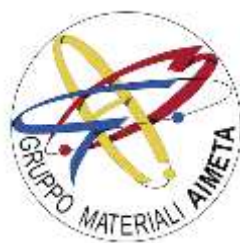22 February 2019, De Donato Conference Room (Campus Leonardo, Building #3)

THE BASICS OF INTELLECTUAL PROPERTY FOR YOUNG ENTREPRENEURS

The THEOREM - youTH intEllectual prOpeRty Education program has implemented an awareness cycle of seminars to promote and spread knowledge of Intellectual Property (IP) and the importance of respecting the IP rights in the context of creative and high-tech startups.
This seminar targets university students and young future entrepreneurs and aims to make them acquainted with the basics of IP rights, to inform on how to manage the IP rights in the context of start-ups and avoid the most recurrent errors. Also, a reference on how to protect computer implemented inventions will be discussed.

7 February 2019, Palazzo Giureconsulti - Piazza dei Mercanti 2, Milano

GMA PRIZE FOR THE BEST PHD THESIS IN *MECHANICS OF MATERIALS*

AIMETA is the Italian Association for Theoretical and Applied Mechanics. Its *Gruppo Materiali* has announced the 4th edition of the "Prize for the best PhD thesis in Mechanics of Materials", to be conferred to a young scholar who obtained his/her PhD in 2018, with a thesis on related topics.

Extended deadline for applications: 17 February 2019
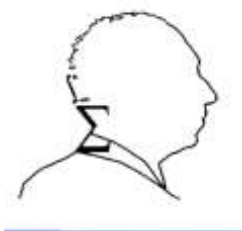
MILANO DESIGN PHD FESTIVAL

Milano Design PhD Festival is a program of meetings with the international protagonists of design culture.
It is an occasion to take part in the final PhD defenses of PhD candidates.
All venues are open to the public and are organized in English. The intention is to discuss several issues in design process among Italian and international researchers, PhD candidates and world mentioned professors.

From 20 to 22 February 2019, Campus Bovisa, via Candiani 72

ASSOCIAZIONE ANGELO MARCELLO ANILE – ANILE PRIZE 2018

The prize will be awarded for a PhD thesis (in English) submitted in an Italian university, concerning a topic that bridges the gap between *mathematics* and *its applications*. Work that uses advanced mathematics or proposes new mathematical tools in order to solve applied problems from economics, engineering, science and technology is particularly appropriate. The work will be evaluated on the basis of the quality of the mathematics and of its impact on the application.

Deadline: 31 March 2019

FRONTRUNNER GRANTS

Would you like to join colleagues at other IDEA League universities, to explore an exciting research idea? Consider applying for an IDEA League *Frontrunner Grant*, a funding instrument open to professors, post-docs and PhD candidates that will support you in your first meeting, workshop or visit, to develop a common initiative and to strengthen or create a network. The grant will provide you a budget from 500 to 5,000 € for venue, catering and additional technical support.

For more information and how to apply visit:

IN.TENSION EXHIBITION : CALL FOR PROTOTYPES

The IN.TENSION exhibition will be held at Politecnico di Milano from the 3rd to the 15th of June 2019, as part of the activities of the 6th TensiNet Symposium, which focuses on tensile architecture. A collection of projects and prototypes will be exhibited in the Guido Nardi space and around Campus Leonardo, highlighting the latest research advances in the field of membrane structures. The prototype exhibition is especially made for students and researchers who want to show their experimental projects by using mock-ups in various scales.

Apply now to the call for prototypes by submitting a poster within the 18th of February. If you wish to simply attend the conference's plenary sessions and keynote lectures, we inform you that the early-bird registration closes on the 28th of February.

For any further information, visit the official website: www.tensinet2019.polimi.it

Deadline for applications: 18 February 2019

MOBILITY GRANTS BETWEEN ITALY AND FRANCE

The Vinci programme promotes collaboration between Italian and French Institutions at the Master, PhD and Post-Doc levels. The call issues grants for four chapters: 1. joint or double Master degrees; 2. mobility grants for doctoral theses in cotutelle; 3. full three-year scholarships for joint or double doctoral degrees; 4. post-doc grants.

Deadline: February 8th, 2019

VICENZA CITTÀ IMPRESA – ACADEMY PROJECT

Travel grants to attend the Festival: meetings and visits to companies to explore the key issues of the economy, finance, new technologies and the world of work
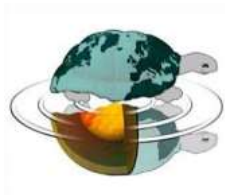
Vicenza, 29-31 marzo 2019

SEMINARS AND WORKSHOPS

INTERNATIONAL MULTIBODY SUMMER SCHOOL 2019

An international summer school on multibody dynamics will be held in Parma, Italy, in May 2019.

May 20-24, 2019 - Parma

WORKSHOP ON "ENERGY GEOMECHANICS"

Geomechanical applications in the field of energy engineering have received increasing attention in recent years, both from the industry and the academia. Energy geomechanics problems are usually rather challenging, as they involve the interaction of soils and rocks with the natural and engineered environment, and are highly interdisciplinary as they require the expertise of specialists both in the fields of engineering and geology. The seminars presented during this workshop will cover a broad range of energy geomechanics applications, spanning from subsidence and hydraulic fracturing in Oil&Gas applications to energy geo-structures and offshore renewable energy installations. Seminars will be in Italian.

12 February, 9:00-16:00, Aula C13, Via Mangiagalli 25, Milano

COLD GAS SPRAY TECHNOLOGY, FUNDAMENTS AND MAIN PARAMETERS OF THE PROCESS

This seminar will present thermal spray technologies and compare conventional techniques to novel cold spray technology (CGS) and its advantages.

February 8th, 2:00 pm – Sala Consiglio, Depart. of Mechanical Engin., La Masa

WORK AND WELFARE IN THE DIGITAL ERA – ESPANET SPRING SCHOOL (PISA, 8–11 MAY 2019)

The Spring school aims at collecting knowledge and expertise on the impact of the so-called 4th Industrial Revolution (4IR) - the integration of cyber-physical systems and the internet of things, big data and cloud computing, robotics, artificial-intelligence based systems and additive manufacturing - on both social and labour market policies. The School is targeted to PHD students and post-doc researchers from all over Europe, who will interact and be mentored by leading experts in the field through front lectures, presentations and discussion, as well as plenary roundtables.
Venue: Scuola Superiore Sant'Anna in Pisa, Italy
Tuition fee: 300 Euros

Application deadline: 29th March 2019

STARTING COURSES – PHD SCHOOL

ETHICS IN RESEARCH

Prof. Andrea Aliverti

The aim of the course is to make participants a) fully aware on how scientific and technological research have ethical implications; b) to identify ethical issues in specific research cases and procedures; c) to understand how the adherence to ethics standards is essential not only for respecting ethical values and fundamental rights, but also increase quality and likely impact of research.

From February 4th to February 8th 2019

PROJECT MANAGEMENT (IN ACTION)

Prof. Mauro Mancini

The course aims at introducing the students in the characteristics of project-based operations and offering them the opportunity to practicing on the tools and techniques for the planning and control of projects. Three sectors will be specifically addressed - Oil and Gas, civil and ICT - in order to share practical techniques to manage small, large and mega projects.

From February 4th to February 8th 2019

PROJECT MANAGEMENT BASICS

Prof. Alfonso Fuggetta

Develop Project Management competencies and provide basic tools and techniques for Project Management activities.

From February 5th to February 19th 2019

STARTING COURSES – DOCTORAL PROGRAMMES

PHD IN *INFORMATION TECHNOLOGY*

ADVANCES IN DEEP LEARNING WITH APPLICATIONS IN TEXT AND IMAGE PROCESSING

Prof. Matteo Matteucci

The goal of the course is to provide the students with the skills to understand, become familiar, and use for their research the most successful architectural patterns in deep neural networks. This is intended as an advanced course, thus proficiency in neural networks and basic notions of non linear optimization and image/signal processing are assumed as pre-requirement to the participants.

From January 7th to March 28th 2019

BEYOND CMOS COMPUTING

Prof Daniele Ielmini

The mission of the course is to give an overview of the most advanced technologies for the scaling of computing circuits beyond CMOS. The goals are (i) understanding of the transport/switching in novel materials and devices, (ii) understanding novel computing approaches beyond conventional von Neumann architecture, and (ii) benchmarking of various approaches in terms of speed, power consumption and area scaling.

From February 1st to February 8th 2019

FORMAL LANGUAGES AND AUTOMATA TO MODEL COMPLEX STRUCTURES: TWO-DIMENSIONAL AND OPERATOR PRECEDENCE LANGUAGES

Prof Matteo Pradella

The course aims at presenting a number of different recent theoretical models and classes of formal languages, suitable for many different applications, e.g. verification of infinite-state systems, pattern recognition, parallel parsing, bio-inspired computing.

From February 11th to 21st February 2019

LEARNING SPARSE REPRESENTATIONS FOR IMAGE AND SIGNAL MODELING

Prof Giacomo Boracchi

The main goal of this course is to provide the student with an understanding of the most important aspects of the theory underlying sparse representation and, more in general, of sparsity as a form of regularization in learning problems.

From February 5th to March 1st 2019

LOCATION, NAVIGATION AND COOPERATIVE SYSTEMS FOR SMART MOBILITY

Prof Monica Nicoli

Goals of the course are: 1) Cover the fundamentals of wireless positioning and navigation systems for localization/tracking of a single target, 2) Extend the analysis to a collection of entities (e.g., vehicles), illustrating cooperative techniques for multi-target localization/tracking and statistical methods for traffic flow estimation/prediction; 3) Discuss applications to intelligent transportation systems (ITS), with emphasis on new cooperative systems (C-ITS) with interconnected users/vehicles.

From February 7th to February 27th 2019

OTHER NEWS

QUESTIONNARIE ON DOCTORAL TRAINING

Do you want to provide your opinion to help building a proposal for a doctoral training curriculum on soft and transferable skills?
Please fill in and submit the [questionnaire](#) prepared by POLIMI, TU Berlin, NTNU and Warsaw UoT within the dedicated Erasmus+ project "Training the MindSET".

Deadline: 10 February 2019

MECCPHD COLLOQUIA DOCTORALIA 2019

Finale Defences of the XXX and XXXI Cycles PhD Candidates – Department of Mechanical Engineering

February 18th, 21st, 22nd 2019

LITTLE PORTABLE TERMINOLOGY – PETITE THERMINOLOGIE PORTATIVE

The term Open Acces and its acronym OA is officially referred to the [2003 Berlin Declaration](#), enshrining Internet as the medium for an open "electronic" distribution of human knowledge and our cultural heritage

An US non-profit devoted to openness and sharing, offering a legal infrastructure facilitating universal access to research, education, culture, main drivers for economic and social development/growth.

DOAJ (Directory of Open Access Journals) is an independent, free of charge, online directory, indexing and providing access to open access, peer-reviewed (high quality supposed) journals.

OASPA is the [international community of open access publishers](#), committed to developing and disseminating open access solutions, preserving the integrity of scholarship.

The Digital Object Identifier is an infrastructure for persistent and unique identification of any digital object, widely used to identify journal articles, research reports and data sets, (ISO 26324).

DataCite is a non-profit organisation providing persistent identifiers (DOIs) for research data and accompanying metadata to enhance search and discovery of research content and data citation.

OPEN CULTURE collects cultural & educational resources and keeps them available to all, for free, curating it: Online Courses, Movies, Audio Books, MOOCs: worth a tour.

Gold Open Access

A journal in which all articles are available as open on the journal website while the costs of their publication, if any, are payed by the authors, as APC (Article Processing Charge).

Green Open Access

A journal accepts that authors archive a copy of their articles and keep freely accessible in institutional or specialist online repository or website (*Hybrid OA* is a green+gold OA), also after a short embargo.

BLACK Open Access

It is the use of illegal pirate sites like Sci-Hub or LibGen.