



European Session
FAUBAI Conference 2018

European contributions to Brazilian Higher Education and Research Institutions internationalization

Tuesday, 17 April 2018, 11:00-12:30, Sul American Convention Center – Room 2

The Italy-Brazil scientific and academic cooperation: some aspects, some opportunities

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The Italy-Brazil scientific and academic cooperation: some aspects and opportunities

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- 1) The formal framework
- 2) Some aspects of the Italian contribution to Brazilian scientific development
- 3) Why a double title
- 4) Some opportunities



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The formal framework

The bilateral committee for S,T & I

- Italy and Brazil meet periodically for discussing about scientific & technological cooperation

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Priorities 2015:

Space, Physics and Astro-physics

Innovation, Nanotechnologies and New Materials

Agriculture, Agro-energy, Food Technologies and Environmental Biology



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The formal framework

The bilateral committee for S,T & I

- Next Committee on 2019 in Rome

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Priorities 2019:

Health 4.0

Space, Urban waste recovery technologies, ...?

Bio-energy, -food, -technology, ...?



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Italy supports the innovation cooperation in the health sector

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*Ministero degli Affari Esteri
e della Cooperazione Internazionale*

#VIVERE ALL' ITALIANA

"Salute 4.0 e l'innovazione che parla italiano"
Gli Addetti promotori della diplomazia scientifica nel mondo

Riunione degli Addetti Scientifici

Roma, 5-6 Febbraio 2018

Ministero degli Affari Esteri e della Cooperazione Internazionale
Sala Conferenze Internazionali



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Italy supports the innovation cooperation in the health sector *(follows)*

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Ore 14:20 Tavolo 1. Nanomedicina e Nuovi Materiali per la salute

Medicina rigenerativa, nanosicurezza, Lab-on-a-chip, bioMEMS, ingegneria tissutale, 3D printing, RRI-Responsible Research and Innovation per le nanotecnologie.

Ore 15:15 Tavolo 2. ICT per la Salute e Big Data

E-health, M-health, Artificial intelligence, Internet of things, High performance computing, cloud – computing, Big data, cybersecurity, protezione e tutela dei dati personali, robotica.

Ore 9:00 Tavolo 3. Nuove terapie/ FARMA

Farmaci intelligenti, drug delivery systems, vaccini, terapie avanzate.

Ore 10:30 Tavolo 4. Nuove tecnologie per la salute - Diagnostica

Diagnostica, imaging, medicina nucleare, tecnologie spaziali per la salute.

Ore 12:00 Tavolo 5. Salute, Nutrizione e Ambiente

Determinanti di malattia e invalidità, epidemiologia e prevenzione, impatto del cambiamento climatico sulla salute, monitoraggio e impatto della qualità dell'aria e dell'acqua, smartFood e healthy food, Food safety – Food security, tecnologie alimentari.



Some aspects of the Italian contribution to Brazilian scientific development

Examples from the past

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- Liaisons between Brazil and Italy are evident
- It is a long-time that also the scientific cooperation has been developing
- In many cases, this high level cooperation is little known



Some aspects of the Italian contribution to Brazilian scientific development

Examples from the past

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□ Enrico Fermi and the foundation of a physics school in Brazil

[Estudos Avançados](#)

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Estud. av. vol.28 no.82 São Paulo Oct./Dec. 2014

<http://dx.doi.org/10.1590/S0103-40142014000300016>

COMENTÁRIO

Sobre a viagem de Enrico Fermi ao Brasil em 1934

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Some aspects of the Italian contribution to Brazilian scientific development

Examples from the past

... Assim, Fermi, além de ser um nome importante para a História das Ciências, ao indicar Wataghin, acabou deixando indelével marca na criação e institucionalização da pesquisa científica nacional

....

RESUMO

Enrico Fermi foi um dos maiores físicos do século passado. Em 1934, fez uma série de palestras no Brasil. Convidado por Theodoro Ramos para trabalhar em São Paulo, preferiu trabalhar nos Estados Unidos a partir de 1938. No entanto, indicou Gleb Wataghin - a quem Cesar Lattes se referia como "pai" da Física brasileira - para vir em seu lugar. Wataghin fez história no Brasil, tornando-se um dos primeiros catedráticos da futura Universidade de São Paulo. Assim, Fermi, além de ser um nome importante para a História das Ciências, ao indicar Wataghin, acabou deixando indelével marca na criação e institucionalização da pesquisa científica nacional. Apesar disso, sabe-se muito pouco sobre a viagem de Fermi ao Brasil. Esse trabalho reconstitui da forma mais ampla possível os passos do famoso físico italiano em nossas terras.

Palavras-chave: Enrico Fermi, Física, História da Ciência, Brasil.



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Some aspects of the Italian contribution to Brazilian scientific development

Current cooperation : some figures

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The national database CINECA ...

The screenshot shows the header of the CINECA database search results page. It includes logos for MIUR (Ministero dell'Istruzione, dell'Università e della Ricerca), MAE (Ministero degli Affari Esteri), and CRUI (Conferenza dei Rettori delle Università Italiane). The search results for 'Americhe - Brasile' show 831 agreements found. A yellow circle highlights the number '831' in the search results.

Ministero dell'Istruzione, dell'Università e della Ricerca
MIUR

Ministero degli Affari Esteri
MAE

CRUI
Conferenza dei Rettori delle Università Italiane

Ricerca Avanzata

Collaborazioni interuniversitarie

« [Torna alla ricerca](#)

Hai cercato:
Americhe - Brasile

Accordi trovati: n. 831

[1-100](#) [101-200](#) [201-300](#) [301-400](#) [401-500](#) [501-600](#) [601-700](#) [701-800](#) [801-831](#)



Some aspects of the Italian contribution to Brazilian scientific development

Current cooperation : some figures

- ❖ Between 2007 e 2017, **843** signed agreements (347 in LS)
- ❖ Brazil is preferred to the USA

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Distribuzione Accordi, Università Italiane e Straniere

Paese	N. Accordi	N. Università Italiane	N. Università Straniere
Francia	<u>1262</u>	<u>79</u>	<u>163</u>
Spagna	<u>1146</u>	<u>78</u>	<u>66</u>
Brasile	<u>843</u>	<u>70</u>	<u>192</u>
Stati Uniti	<u>841</u>	<u>78</u>	<u>324</u>
Cina	<u>737</u>	<u>65</u>	<u>222</u>
Germania	<u>733</u>	<u>69</u>	<u>144</u>
Russia	<u>543</u>	<u>66</u>	<u>135</u>
Argentina	<u>499</u>	<u>65</u>	<u>77</u>



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Some aspects of the Italian contribution to Brazilian scientific development

Current cooperation: some figures

The true number of agreements (mobility, research, ...) must consider different type of MoU

- signed by Rectors → you'll find on CINECA database
- among Dept.'s, Faculties, Institutes, Schools, .. → ?
- personal cooperation → ?
- Their dynamic nature makes the monitoring difficult
- Maybe they are 2-3 times as many



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Some aspects of the Italian contribution to Brazilian scientific development

Current cooperation: a mapping

- An assessment by default on 30 Italian institutions suggests that currently there are
 - ❑ > 400 agreements in force
 - ❑ > 100 Brazilian institutions involved
- Many with south-east region (historical presence, economic development)
- Policy 2018: focus on developing North-East academic and technological cooperation



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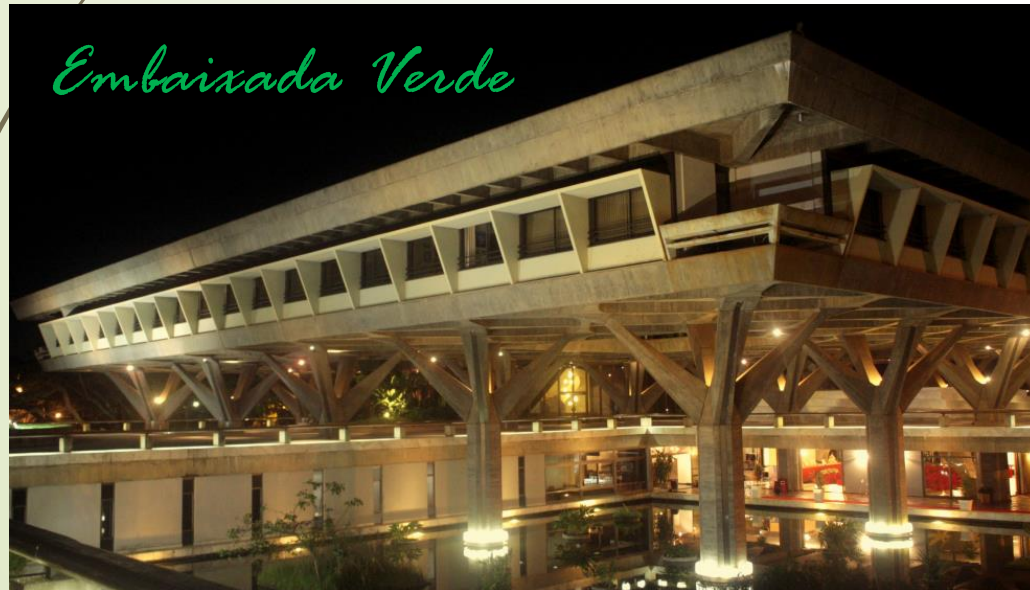


Some aspects of the Italian contribution to Brazilian scientific development

A demonstration project: the Green Embassy

Promoting the Italian science and technology means also supporting some demo project: the Green Embassy

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Solar fotovoltaico





Some aspects of the Italian contribution to Brazilian scientific development

A demonstration project: the Green Embassy

- ANEEL regulation on distributed production comes out from the PV system installed 7 years ago on the roof of the Embassy
- A cooperation project among IT Embassy, UnB, PoliTo, ENEL GP Brazil

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Photovoltaic system of Italian Embassy



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Some aspects of the Italian contribution to Brazilian scientific development

Focus on post-degree

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- A main exchange of scientific experience derives from post-degree mobility, masters and PhD
- Many programmes, research or mobility, bilateral or multilateral, focus and support post-degree cooperation



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Why a double title

From student mobility to labour force mobility

- International student mobility has been a target of Brazilian policy in last years (SwB)
- Bilateral and multilateral agreements support the post-degree mobility
- A main barrier to labour force mobility is academic title recognition



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Why a double title

The education path is different

❖ Brazil, a typical path in Engineering

- 2 study cycles before University (12 years, from 6 to 18 years old)
- 5 years graduation (from 18 to 23 years old)
- 2 years master (from 23 to 25 years old)
- 3 years PhD (also 23 to 26 years old)



Why a double title

The education path is different

- ❖ Italy, a typical path in Engineering
 - 3 study cycles before University (13 years, from 6 to 19 years old)
 - University “Bologna process”
 - 3 years graduation (19 to 22)
 - 2 years master (22 to 24)
 - 3 years PhD (24 to 27)



Why a double title

The equivalence from different point of views

❖ Age and credits at the end of graduation

- Brazil: 23 years old, 17 years of study
- Italy: 22 years old, 16 years of study

❖ Age and credits at the end of master

- Brazil: 25 years old, 19 years of study
- Italy: 24 years old, 18 years of study



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Why a double title

The equivalence from different point of views

- ❖ Age and credits at the end of PhD
 - Brazil: 26 years old, 20 years of study
 - Italy: 27 years old, 21 years of study

NB – Graduation: 1 year less in Italy
PhD: 1 year less in Brazil



Why a double title

The equivalence from different point of views

- ❖ To register for the PhD
 - Brazil: graduation (in many cases)
 - Italy: master (mandatory)
- From the point of view of PhD registration, Italian “Laurea Magistrale” (master) is equivalent to the sum of Brazilian graduação + mestrado



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Why a double title

The equivalence from different point of views

- ❖ Enrolment in professional registers requires
 - Brazil: graduation (no master)
 - Italy: master
- In Italy for working as professional you need 1 more year of study and you are 1 year older
- The value of Italian master is much higher than Brazilian master: it allows working all over the EU



Why a double title

A loophole with many positives

- ❖ No more title recognition is required for working
- ❖ Exit from the university is not delayed
- ❖ It gives an evident added value



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Why a double title

A possible strategy to provide an operational framework

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Premise: the universities are independent in the evaluation of the training

- ❑ Governments can support double degrees, but implementation is responsibility of the universities
- ❑ Governments can suggest equivalence (ex. master-master; Phd-PhD), but each course council must evaluate the training paths, case by case



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Why a double title

A possible strategy to provide an operational framework

- ❑ Bilateral agreements between universities for double titles can state:
 - ✓ The PhD equivalence and the conditions for enrollment (easy)
 - ✓ The Italian Laurea Magistrale equivalence to Graduação+Master and the conditions for enrollment (less easy)



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Why a double title

A possible strategy to provide an operational framework

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Master double title - The owner of the Italian Laurea Magistrale must obligatorily get the Brazilian Graduação before enrolling the Master

Example of conditions for granting the graduação:

- ✓ discussing a thesis in front of an international commission, or
- ✓ incurring additional exams, or ...



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Some opportunities

Supporting the post-degree mobility in Italy

❖ Bilateral opportunities

- Italy: MIUR, MAECI, Regions, Universities, Companies, ...
- Brasil: CAPES, CNPq, CONFAP (FAPs), FINEP, EMBRAPA, ...

❖ Multilateral opportunities

- EU (ERASMUS +, HORIZON2020), Universities networks, Agencies, Companies, ...



Some opportunities Bilateral (origin BR)

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❖ MCI

MOBILITY CONFAP ITALY

You are here: [Home](#) > [Mobility Confap Italy](#)

Mobility Confap Italy Project

Would you like to have a university experience in Italy or in Brazil? Learn more about Mobility CONFAP-ITALY project.

Click to zoom

Project
The project aims at facilitating and supporting effective collaboration between CONFAP and the Italian Network to further

Italian Network
The Italian Network currently includes 18 Universities and one Research Center. The Italian institutions work in cooperation with

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❖ International programs of Brazilian universities following the CAPES call



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Some opportunities

Bilateral (origin IT)

❖ Italian government fellowships

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- **BANDO RELATIVO ALLE BORSE DI STUDIO OFFERTE DAL GOVERNO ITALIANO IN FAVORE DI STUDENTI CITTADINI STRANIERI PER L'A.A. 2018-2019**

Sono attive le procedure per l'assegnazione di borse di studio concesse dal Governo Italiano in favore di studenti stranieri per l'anno accademico 2018-2019.

Il bando contenente le disposizioni per la presentazione delle candidature e le istruzioni relative all'iter di selezione delle domande è pubblicato sul nuovo portale dedicato alle borse di studio <https://studyinitaly.esteri.it>

Il portale è stato pensato anche per fornire informazioni utili agli studenti interessati a studiare nel nostro Paese. Sul portale sono inoltre riportate, in italiano e in inglese, tutte le informazioni utili agli studenti vincitori di una borsa di studio per un più agevole soggiorno in Italia, ivi comprese le indicazioni per l'iscrizione presso l'Istituzione prescelta, le modalità del pagamento trimestrale delle mensilità e la copertura assicurativa.

Il bando sarà aperto fino alle ore 14:00 (ora italiana) del 30 APRILE 2018. Le candidature pervenute oltre la scadenza indicata saranno considerate irricevibili.



Some opportunities Bilateral (origin IT)

❖ University fellowships

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• INTERNATIONAL TRAINING PROGRAM (ITP), UNIVERSITÀ LUISS

The International Training Program - ITP - is a collaborative project of LUISS University and Terna Group aimed at training future country managers in specific countries, providing them with the highest standards in academic preparation.

The ITP combines academic education and company experience: interactive lectures and case discussion sessions are woven with project work and internships. 2018-2019 academic year, the selected countries are Brazil, Chile, Uruguay and Peru.

Students chosen from the target countries will have the opportunity to:

- pursue their studies in the two-year Master's program in Management - ranked amongst the top 100 Master's programs by the Financial Times - at LUISS University - Rome;
- attend elective courses co-designed and co-delivered by LUISS and Terna, concerning sector-specific topics;
- work as interns during the program at Terna's branches in the target countries or other pre-approved geographical areas.



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Some opportunities

Bilateral (origin IT)

❖ Italian Regions fellowships

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BORSE DI STUDIO UNIVERSITARIE PER DISCENDENTI DI EMIGRATI UMBRI RESIDENTI ALL'ESTERO A.A. 2018-2019

16/04/2018

L'Agenzia per il diritto allo studio universitario dell'Umbria (ADiSU), d'intesa con la Regione Umbria e in collaborazione con gli Atenei, gli Istituti universitari umbri e le Associazioni degli Umbri all'Estero, ha pubblicato un bando di concorso destinato ai discendenti di umbri residenti all'estero. Il progetto intende rivalu...

❖ Italian foundations support



Some opportunities

Web site information

- ❖ <https://studyinitaly.esteri.it/>
- ❖ <http://www.miur.gov.it/>
- ❖ www.studiare-in-italia.it/studentistranieri/
- ❖ www.universitaly.it



Some opportunities

Multilateral

Do not forget

- ❖ ERASMUS +
- ❖ CONFAP-EU Agreement
- ❖ ...



Obrigado pela atenção

Roberto Bruno