# **COOPERATION AGREEMENT**

### **AMONG:**

# THE BOARD OF REGENTS OF THE UNIVERSITY SYSTEM OF GEORGIA BY AND ON BEHALF OF THE GEORGIA INSTITUTE OF TECHNOLOGY (USA), GEORGIA TECH LORRAINE (FRANCE) AND

# SAPIENZA - UNIVERSITÀ DI ROMA (ITALY)

#### WHEREAS

The Sapienza - Università di Roma (Sapienza), the Board of Regents of the University System of Georgia by and on behalf of the Georgia Institute of Technology (GIT), and Georgia Tech Lorraine (GTL) wish to establish solid and sustainable collaborations in education.

#### WHEREAS

Georgia Institute of Technology (GIT) has established its European campus, Georgia Tech Lorraine (GT-L) on the Metz Technopôle. Georgia Tech Lorraine (GT-L) is a Cooperative Organization of the Georgia Institute of Technology (GIT).

#### WHEREAS

GIT, GTL and Sapienza jointly recognize the importance of international cooperation in the areas of education, faculty and researchers exchange.

#### **IT IS AGREED THAT**

GIT, GTL and Sapienza will seek to establish solid collaborations in the areas of education, faculty and researchers exchange.

#### Nomenclature

Within the scope of this agreement, Institution refers to an entity delivering degrees, namely the Georgia Institute of Technology (GIT) and the *Sapienza - Università di Roma* (*Sapienza*). Organization refers to a legal entity, namely GIT, Sapienza and Georgia Tech Lorraine (GTL).

# 1. EDUCATION

The main objective is to enable Sapienza and GIT students to graduate both with the *Laurea Magistrale* from Sapienza and the Master of Science in Mechanical Engineering degree from GIT.

# 1.1. Graduate Level Education: Laurea Magistrale or Master Sapienza and Master of Science GIT

This section concerns students enrolled at Sapienza in the Laurea Magistrale also wishing to pursue the Master of Science degree from GIT.

<u>Admissions:</u> GIT shall admit at GT-L, as degree-seeking graduate students, students who are accepted into GIT based upon the Institute's published admissions policies, rules, and regulations. To be eligible for consideration as a GIT degree-seeking graduate student, students must be enrolled in the first year of the Laurea Magistrale in Mechanical Engineering at Sapienza at the time of application. These students must complete successfully the first year of the Laurea Magistrale and submit an updated transcript once that document is available. The students are recommended by Sapienza, based on an internal selection process, for admission to the Graduate Program in Mechanical Engineering (ME). Students are eligible to receive the Laurea Magistrale from Sapienza and the Master of Science degree from GIT, at the time of completion of graduation criteria of both Institutions.

<u>Program Structure:</u> The Sapienza students spend the Fall semester at the second year of the Laurea Magistrale at GTL and the following Spring semester at GIT. They are full-time in each case.

<u>Transfer of Credits:</u> Students are allowed to transfer credits taken at Sapienza toward the degree requirements of the Master of Science in accordance with the GIT Transfer Credit and academic unit rules, which are subject to rules of the Board of Regents of the University System of Georgia.

Tuition and Fees: Each student participating in this program will pay the following tuition and fees:

- Reduced Non-Resident rate while studying on the Lorraine campus (GTL)
- Non-resident rate while studying on the Atlanta campus (GIT)
- Sapienza rate while studying on the Sapienza campus. GIT will not charge tuition and fees when the student is studying at Sapienza.

Both Institutions will try to secure funds (corporate sponsors, assistantships, fellowships) for students participating in the program, but such funding is not guaranteed.

Both Institutions will inform each other on the rate of the tuition and fees on a yearly basis, with the Sapienza and GIT tuition and fee rates being available on-line each year (typically no later than May) for the following academic year: <u>http://en.uniromal.it/study-us/degree-programmes/tuition-fees</u> and http://www.bursar.gatech.edu.

#### 1.2. Graduate Level Education: Master of Science GIT and Laurea Magistrale Sapienza

This section concerns students enrolled at Georgia Tech in the Master of Science in Mechanical Engineering also wishing to pursue the Laurea Magistrale in Mechanical Engineering from Sapienza.

<u>Admissions:</u> Sapienza shall admit GT students that satisfy its admission requirement. Students are eligible to receive the Laurea Magistrale from Sapienza and the Master of Science degree from GIT, upon completion of graduation criteria of both Institutions.

<u>Program Structure</u>: The GT students spend the Fall and Spring semesters on the GT-L campus, before joining Sapienza the following Fall semester for one-year. They are full-time in each case.

<u>Transfer of Credits:</u> Students are allowed to transfer credits taken at Sapienza toward the degree requirements of the Master of Science in accordance with the GIT Transfer Credit and academic unit rules, which are subject to rules of the Board of Regents of the University System of Georgia.

Tuition and Fees: Each student participating in this program will pay the following tuition and fees:

- Reduced Non-Resident rate while studying on the Lorraine campus (GTL)
- Sapienza rate while studying on the Sapienza campus, without ISEE reductions. GIT will not charge tuition and fees when the student is studying at Sapienza.

Both Institutions will try to secure funds (corporate sponsors, assistantships, fellowships) for students participating in the program, but such funding is not guaranteed.

Both Institutions will inform each other on the rate of the tuition and fees on a yearly basis, with the Sapienza and GIT tuition and fee rates being available on-line each year (typically no later than May) for the following academic year: <u>http://en.uniromal.it/study-us/degree-programmes/tuition-fees</u> and http://www.bursar.gatech.edu.

#### 1.3. Miscellaneous

Students will be provided advisement and guidance through the appropriate Administrative Offices of Sapienza and GTL/GIT regarding their application. They will also be provided all necessary information and documents regarding immigration, insurance, and housing by the GTL office. Students are responsible for providing all information requested for immigration purposes and for completing and submitting required forms by the appropriate deadlines.

Each Institution will notify all students who are regularly enrolled in its Institution of the requirements for the students to purchase personal insurance (at a minimum this is likely to include health, evacuation, and repatriation coverage) during their travel and their stay at the hosting Institution.

Students are responsible for all costs necessary for participation in and completion of the program, including but not limited to transportation, insurance, and housing. Official documentation showing sufficient funds to complete study outside of the home country may be required by immigration authorities.

#### 2. FACULTY AND RESEARCHERS EXCHANGES

GIT and Sapienza confirm that the exchange of faculty members and researchers is an important element to strengthen their relationship. Toward this goal, Sapienza faculty members may be invited to teach and/or participate in specific research programs at GIT or GTL when practical and in the interest of all parties. Likewise, GIT faculty members may be invited on a regular basis to teach and/or participate in specific research programs at Sapienza when practical and in the interest of all parties.

These exchanges shall be subject to policies and regulations regarding leave, short-time missions, assignment, and sabbatical, of each Institution and applicable immigration laws. The administrative and financial framework of such faculty and researcher exchanges shall be determined on a case-by-case basis in a separate written agreement.

#### **3. EXPORT CONTROL**

The Parties agree that the performance of this agreement, including any research projects by graduate students either at Sapienza or at GIT is subject to Georgia Tech's compliance with the U.S. Export laws, including but not limited to the Export Administration Regulations and the International Traffic in Arms Regulations. As such, Georgia Tech's performance of research

pursuant to any educational program or specific research agreement must comply with such regulations and may require an export license prior to the initiation of such project and/or transfer of data. Further, the Parties agree that students and faculty participating in this program, and any activity related thereto, may not include persons listed as denied or otherwise restricted under laws and regulations of the U.S. Office of Foreign Assets Control, Department of Commerce, Department of State, or other U.S. government agency or persons who are nationals of countries with such designations.

# 4. ACCREDITATION

GIT and Sapienza programs are both accredited by the appropriate agencies and/or commissions of their countries. Sapienza's accreditations do not extend to GIT and GIT's accreditations do not extend to Sapienza.

#### 5. AMENDMENTS

Amendments to this agreement may be proposed in the future to address any matter, including but not limited to increasing the number of joint efforts and to enhancing the common means implemented together in a spirit of reciprocity and efficiency.

These amendments must be accepted and signed by the three Organizations before they become effective.

# 6. STARTING DATE, STATUS, AND CANCELLATION

This agreement will be effective as of the date of its signing by the authorized representatives of Sapienza, GIT and GTL.

Sapienza, GIT and GTL also agree to hold periodic meetings alternatively in France, Italy or in the United States of America, in order to assess the status of the current programs and to organize, if necessary, new activities.

Each signer may cancel this agreement upon ninety days written notice. In such an event, the obligations of Sapienza, GIT and GTL towards students who are already in the programs will be carried out under the conditions of the present agreement.

#### 7. CONDITIONS

This agreement is subject to the policies and procedures of the Georgia Institute of Technology and the Board of Regents of the University System of Georgia, as well as the regulations and policies of the authorities governing Sapienza, as well as the rules and regulations of the General Assembly of Georgia Tech Lorraine.

This agreement is valid for a period of five years from the signature date. It may be renewed by written agreement of both institutions.

The English version of the agreement is binding in case of disagreement. There is no other signed original version of this agreement.

On this date:

Georgia Institute of Technology

has

Rafael Bras Provest

APPROVED AS TO LEGAL FORM

**Georgia Tech Lorraine** 

Yves Berthelot President

Sapienza

Luigi Frati Rector 7-

Sapienza

Fabrizio Vestroni Dean of the School of Civil and Industrial Engineering

# EXECUTIVE DISPOSITION FOR A DOUBLE DEGREE BETWEEN "SAPIENZA"

# UNIVERSITY OF ROME, GEORGIA INSTITUTE OF TECHNOLOGY AND

# GEORGIA TECH LORRAINE

The partner institutions allow the establishment of a double degree program, formed of the "Laurea Magistrale" (Italian degree) in Mechanical Engineering of the "Sapienza" University of Rome and the Master of Science (US degree) in Mechanical Engineering of the Georgia Institute of Technology. Students complying with the degree requirements of both institutions will be granted a double degree.

#### **1** – Executive and managing personnel

- 1. The two partner institutions will appoint a program coordinator.
- 2. All the modifications or improvements in the double degree program are approved by the Mechanical Engineering Area Council and the Council of the School of Civil and Industrial Engineering of the "Sapienza" University of Rome and by the School of Mechanical Engineering of Georgia Institute of Technology and Georgia Tech Lorraine.
- 3. Student admission is separately conducted by each institution. The program coordinator of each Institution is responsible for student advising and continuous program administration.

#### 2 – Admission requirements

 Students from "Sapienza" University of Rome must have a Bachelor degree in Mechanical Engineering with a final grade higher than 100/110 (equivalent minimum GPA > 3.4/4.0), three excellent letters of recommendation from engineering faculty of Sapienza, a IBT TOEFL with a minimum grade of 94, minimum GRE scores of 146/170 in Verbal, 155/170 in Quantitative and 3.5/6.0 (3.0/6.0 is accepted) in Analytical Writing. Students from the Georgia Institute of Technology and Georgia Tech Lorraine must be admitted as matriculated students to the graduate program in Mechanical Engineering.

#### 3 – Language used for mutually transferred classes

1. Courses transferred between the institutions will be taught in English.

#### 4 – Procedure for the admission

- 1. The admission procedures are regulated by each University.
- 2. Student selection is a responsibility of the Mechanical Engineering Area Council for "Sapienza" University of Rome and the School of Mechanical Engineering of the Georgia Institute of Technology and Georgia Tech Lorraine.

#### 5 – Beginning and duration of the studies

1. Student in the program can start in either the Fall (September) or Spring Term (January). The period abroad is expected to have a maximum duration of two semesters, excluding the Summer.

#### 6 – Program content and structure

- 1. The double degree has 120 CFUs for the "Sapienza" University of Rome Curriculum and 30 semester credit hours for the Georgia Institute of Technology Curriculum, as reported for students originally enrolled at the "Sapienza" in Tables 1, 3, 4, 5 and for students originally enrolled at the Georgia Institute of Technology in Tables 2, 3, 4, 5.
- 2. Passing grade and exam policies are exclusively those of the local institution that offer the course.
- 3. The double degree curriculum is unique to this program.

#### 7 – Transfer credits

- 1. Transferring coursework between the partner institutions is possible through this program (see Tables 1-5).
- 2. Courses transferred between the institutions must have minimum grades of B or equivalent (Table 6).
- 3. There will be no delay for the courses to be transferred, i.e., the courses can be transferred to the partner institution as soon as the grades in the granting institution are posted. A transcript will be sent to the partner.

#### 8 – Thesis and Thesis-committee

- 1. After graduation with the MSME from the Georgia Institute of Technology, the student needs to complete a research project/thesis for the completion of the "Laurea Magistrale" (Italian degree) at "Sapienza". This research work could be done either at Sapienza or at GT Atlanta or at GT Lorraine.
- 2. In the case of a co-advisement, all the administrative, financial and logistical issues will need to be solved before the start of the research project. The final research project/thesis will be then reviewed and evaluated by the Georgia Tech faculty and a committee from Sapienza. The project/thesis has to be written in English and should contain a summary in Italian whose length should not exceed ten pages or 20,000 characters.

#### 9 - Diploma, academic title, and general information

1. Upon completion of both the degree requirements, two separate diplomas are conferred to the student according to the local regulations.

- 2. "Sapienza" will provide to Georgia Tech Lorraine a document certifying that the student successfully completed the course part of the "Laurea Magistrale" (Italian degree) so he can graduate from the Georgia Institute of Technology.
- 3. The student will have two diplomas. The diploma from the "Sapienza" University of Rome will report the title of "*Laurea Magistrale*" and the Master of Science in Mechanical Engineering from the Georgia Institute of Technology.
- 4. The two diplomas do not have to be conferred simultaneously. Each can be granted when the student satisfies local regulations.

#### 10 – Student rights

1. Each student will be entitled to regular student rights and privileges at the host institution.

#### 11 – Starting day

1. These regulations are effective along with the agreement between the Institutions and are communicated to the faculty using local rules.

Table 1 - Double Degree Program in Mechanical Engineering. Courses for the students originally enrolled at "Sapienza". First year held at "Sapienza" and courses recognized by Georgia Institute of Technology and Georgia Tech Lorraine.

| Courses at "Sapienza"                      |   | CFU | Courses transferred to<br>Georgia Institute of<br>Technology and<br>Georgia Tech Lorraine                                 | credits        |
|--|---|-----|---|----------------|
|  | Control systems<br>ING-INF/04   | 9   |   |                |
| 1 <sup>st</sup> year<br>fall<br>semester   | Fluid machinery in<br>energy conversion<br>systems<br>ING-IND/08                          | 9   |   | 6 <sup>1</sup> |
|  | Misure meccaniche e<br>termiche (Mechanical<br>and thermal<br>measurements)<br>ING-IND/12 | 9   |   |                |
| 1 <sup>st</sup> year<br>spring<br>semester | Economia ed<br>organizzazione<br>aziendale (Economics<br>and management)<br>ING-IND/35    | 9   | Students are strongly<br>encouraged to  |                |
|  | Misure Industriali<br>(Industrial<br>measurements)<br>ING-IND/12                          | 6   | complete these courses<br>prior to attending the<br>second year at Georgia<br>Institute of Technology<br>and Georgia Tech |                |
|  | Tecnologie Speciali<br>(Advanced<br>manufacturing systems)<br>ING-IND/16                  | 9   | Lorraine  |                |
|  | earn for Sapienza " <i>Laurea</i><br>Magistrale" (LM)                                     | 51  | Total Credits<br>recognized for Georgia<br>Tech MS  | 6              |

<sup>&</sup>lt;sup>1</sup> Transferred from Sapienza "Laurea Magistrale" LM

Table 2 - Double Degree Program in Mechanical Engineering. Courses for the students originally enrolled at Georgia Institute of Technology and Georgia Tech Lorraine. First year held at "Sapienza" and courses recognized by Georgia Institute of Technology and Georgia Tech Lorraine.

|  | rred to "Sapienza" from<br>chanical Engineering | Credits  | Courses at "Sapienza"   | CFU | Courses transferred to Georgia<br>Institute of Technology and<br>Georgia Tech Lorraine | credits        |
|--|---|--|---|-----|--|----------------|
|  |   |  | Control systems ING-INF/04  | 9   |  |                |
| 1 <sup>st</sup> year<br>fall semester<br>Experimental methods<br>lab |   |  | Fluid machinery in energy conversion systems ING-IND/08                                       | 9   |  | 6 <sup>2</sup> |
|  | 3   | Misure meccaniche e termiche <sup>3</sup><br>(Mechanical and thermal<br>measurements) ING-IND/12 | 9   |     |  |                |
| 1 <sup>st</sup> year<br>spring<br>semester                           | Economics                                       | 3  | Economia ed organizzazione<br>aziendale <sup>4</sup> (Economics and<br>management) ING-IND/35 | 9   |  |                |
|  |   |  | Misure Industriali (Industrial<br>measurements) ING-IND/12                                    | 6   |  |                |
|  |   |  | Tecnologie Speciali (Advanced<br>manufacturing systems)<br>ING-IND/16                         | 9   |  |                |
|  |   |  | Total CFU earn or recognized<br>for Sapienza LM   | 51  | Total Credits recognized<br>for Georgia Tech MS  | 6              |

 <sup>&</sup>lt;sup>2</sup> Transferred from Sapienza "Laurea Magistrale" LM
<sup>3</sup> Trasnferred from Georgia Tech BS or equivalent
<sup>4</sup> Trasnferred from Georgia Tech BS or equivalent

Table 3 - Double Degree Program in Mechanical Engineering. Courses for the students originally enrolled both at "Sapienza" and at Georgia Institute of Technology and Georgia Tech Lorraine. Second year held at Georgia Institute of Technology and Georgia Tech Lorraine and courses recognized

| r  | -,  |         | -   | r   |
|--|---|---------|---|-----|
| Courses at Georgia Institute of<br>Technology and Georgia Tech<br>Lorraine             |   | credits | Courses transferred to<br>"Sapienza"  | CFU |
| 2 <sup>nd</sup> year<br>fall<br>semester<br>(Georgia<br>Tech<br>Lorraine)              | ME 6449 Acoustic<br>Transducers &<br>Signal Analysis                          | 3       | Meccanica delle<br>vibrazioni (Mechanical<br>vibrations)<br>ING-IND/13                                      | 9   |
|  | ME 6203 Inelastic<br>Deformation of<br>Bodies                                 | 3       | Mechanical design and<br>laboratory<br>characterization of  | 12  |
|  | ME 6204/<br>Micromechanics of<br>Materials                                    | 3       | micro-nano devices<br>ING-IND/13  |     |
|  | MATH course to be defined   | 3       | Metodi matematici per<br>l'ingegneria<br>(Mathematical methods<br>for engineers) MAT/05                     | 6   |
| 2 <sup>nd</sup> year<br>spring<br>semester<br>(Georgia<br>Tech)                        | ME 6768 Polymer<br>structure, Physical<br>Properties, and<br>Characterization | 3       | Materiali non metallici<br>per l'ingegneria (Non-<br>metallic materials)<br>ING-IND/22                      | 6   |
|  | ME 7772 Fracture<br>Mechanics   | 3       | Elective course at<br>"Sapienza"  |     |
|  | ME 6769 Linear<br>Elasticity  | 3       | Elective course at<br>"Sapienza"  | 6   |
|  | ME 7792 Advanced<br>Mechanics of<br>Composites                                | 3       | Altre attività utili<br>all'inserimento nel<br>mondo del lavoro (Other<br>activities useful for<br>placing) | 6   |
| Credits earn at Georgia Institute<br>of Technology and Georgia Tech<br>Lorraine for MS |   | 24      | Total CFU recognized for<br>"Sapienza" LM   | 51  |

by "Sapienza".

Table 4 - Double Degree Program in Mechanical Engineering. Courses for the students originally enrolled both at "Sapienza" and at Georgia Institute of Technology and Georgia Tech Lorraine. Third year Fall semester Research project to be developed to Sapienza and/or Georgia Institute of Technology and Georgia Tech Lorraine.

| Georgia Institute of Technology and<br>Georgia Tech Lorraine | credits | "Sapienza"         | CFU |
|--|---------|--------------------|-----|
| 2 <sup>nd</sup> year Summer semester                         | 0       | Tesi di Laurea (MS | 10  |
| 3 <sup>rd</sup> year Fall semester                           |         | Thesis)            | 18  |
| Georgia Institute of Technology and<br>Georgia Tech Lorraine | 0       | "Sapienza"         | 18  |

AGREEMENT BETWEEN "SAPIENZA" UNIVERSITY OF ROME, GEORGIA INSTITUTE OF TECHNOLOGY AND GEORGIA TECH LORRAINE TO ESTABLISH A COMMON "DOUBLE DEGREE" GRADUATE CURRICULUM IN MECHANICAL ENGINEERING

|   |            | riginally enrolled<br>Sapienza"                                    | Georgia Inst    | iginally enrolled at<br>itute of Technology<br>gia Tech Lorraine   |  |  |
|---|------------|--|-----------------|--|--|--|
|   | "Sapienza" | Georgia Institute<br>of Technology<br>and Georgia<br>Tech Lorraine | "Sapienza"      | Georgia Institute<br>of Technology and<br>Georgia Tech<br>Lorraine |  |  |
|   | CFU        | Credits  | CFU             | Credits  |  |  |
| 1 <sup>st</sup> year fall<br>& spring<br>semester                                   | 51         | 6  | 51 <sup>5</sup> | 6  |  |  |
| 2 <sup>nd</sup> year<br>fall &<br>spring<br>semester                                | 51         | 24   | 51              | 24   |  |  |
| 2 <sup>nd</sup> year<br>summer<br>semester<br>3 <sup>rd</sup> year fall<br>semester | 18         | 0  | 18              | 0  |  |  |
| TOTAL   | 120        | 30   | 120             | 30   |  |  |

# Table 5 - Double Degree Program in Mechanical Engineering.

 $<sup>^{\</sup>rm 5}$  18 CFU are transferred from Georgia Tech BS, or equivalent, to Sapienza "Laurea Magistrale" LM

# Table 6 - Double Degree Program in Mechanical Engineering 10 courses. Equivalence between Italian CFU and American credits.

| Italian<br>CFU | American<br>credits |
|----------------|---------------------|
| 27-30/30       | А                   |
| 23-26/30       | В                   |
| 18-22/30       | С                   |



# UNIVERSITÀ DEGLI STUDI DI ROMA "LA SAPIENZA"

Area Affan letituzionali Ufficio Affan Generali, Protocollo e Archivi Settore Affan Generali

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Università degli Studi di Roma "LA SAPIENZA" Amministrazione Centrale Decreto n. 3660/2013

prot. n. 0062677 del 29/10/2013

classif. 11/2

IL RETTORE

VISTA la legge n. 240/2010;

- VISTO lo Statuto della Sapienza, emanato con decreto rettorale n. 3689 del 29.10.2012 e pubblicato sulla G.U. Serie Generale n. 261 dell'8.11.2012;
- VISTO l'articolo 2, comma 9, della predetta legge n. 240/2010 che prevede che "Il mandato dei rettori i quali, alla data di entrata in vigore della presente legge, sono stati eletti ovvero stanno espletando il primo mandato è prorogato di due anni e non è rinnovabile" ai sensi del quale il Rettore della Sapienza in carica terminerà il proprio mandato in data 31.10.2014;
- VISTO il D.R. n. 485 del 3.11.2008 con il quale il Prof. Francesco Avallone, Ordinario di Psicologia del lavoro presso la Facoltà di Psicologia II, è stato nominato Prorettore vicario per il quadriennio 2008/2012;
- VISTO il D.R. n. 3637 del 25.10.2012 con il quale l'incarico di Prorettore Vicario già conferito al Prof. Francesco Avallone è stato prorogato fino al 31.10.2013;
- CONSIDERATO che il Prof. Francesco Avallone sarà collocato a riposo, per raggiunti limiti di età, a decorrere dall'1.11.2013;
- CONSIDERATO che, al fine di assicurare la necessaria continuità nello svolgimento delle relative funzioni istituzionali, occorre provvedere alla tempestiva sostituzione del prof. Francesco Avallone nell'incarico di Prorettore vicario, nominando il Prof. Antonello Folco Biagini, Ordinario per il settore scientifico-disciplinare M-STO/03 Storia dell'Europa Orientale presso la Facoltà di Lettere e Filosofia;

#### DECRETA

A decorrere dall'1.11.2013 e fino al 31.10.2014, il Prof. Antonello Folco Biagini, Ordinario per il settore scientifico-disciplinare M-STO/03 Storia dell'Europa Orientale presso la Facoltà di Lettere e Filosofia, è nominato Prorettore vicario in sostituzione del Prof. Francesco Avallone.

لحز:

Il Prorettore vicario coadiuva il Rettore nella sua attività e lo supplisce in tutte le funzioni da lui ocorcitato in caso di assenza ed impedimento.

IL RETTORE -

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