

CONSEIL D'ADMINISTRATION Séance du 28 mai 2019

Délibération n° CA 2019 - 40

relative au mandat de signature CNRS pour la négociation et la signature de la convention portant création du *LIA « FORMATH Vietnam Singapore »* pour le compte de l'IMT-UT Capitole

Vu le code de l'éducation pris notamment en son article L712-3 ;

Vu l'avis favorable de la commission de la recherche en date 13 mai 2019 ;

Le Conseil d'Administration, après en avoir délibéré, décide :

Article unique

Le Conseil d'Administration approuve le mandat pour négocier et signer la convention portant création du *Laboratoire International Associé « FORMATH Vietnam Singapore »* (LIAFVS) pour le compte de l'Institut de Mathématiques de Toulouse.

La Présidente du Conseil d'Administration,



Mandat

L'Université Toulouse 1 Capitole, établissement public à caractère scientifique, culturel et professionnel, située 2 rue du doyen Gabriel Marty, 31042 TOULOUSE Cedex 9, représentée par sa Présidente, **Madame Corinne MASCALA**, donne mandat au CNRS, établissement à caractère scientifique et technologique (EPST), situé 3 rue Michel Ange, 75016 Paris, représenté par son Président-directeur général, **Monsieur Antoine PETIT**, aux fins de négocier et signer en son nom la convention portant création du *Laboratoire International Associé FORMATH Vietnam Singapore* pour le compte de :

- The Institut de Mathématiques de Toulouse, UMR5219

Corinne MASCALA

Présidente de l'Université Toulouse 1 Capitole

AGREEMENT FOR THE CREATION OF AN INTERNATIONAL ASSOCIATED LABORATORY (LIA)

<u>IMPORTANT</u>

An international associated laboratory (LIA) is a "laboratory without wall", and is not a legal entity. It consists of the association of CNRS-affiliated laboratories or teams and foreign Institutions' Laboratory(ies) wishing to pool together human and material resources in order to implement a jointly-defined research program, for a four-year term.

The laboratories or teams composing the LIA retain their independence, their director and their separate locations. The LIA does not require the expatriation of the researchers involved in the program. Resources (equipment, operations, assignments, associated researcher positions) are dedicated by the CNRS and the partner research institutions to the LIA program.

The LIA is coordinated by coordinators who jointly assume scientific responsibility for the LIA. The Steering Committee, composed of representatives of the Parties and persons from outside the LIA if needed, give an opinion on the progress, program and direction of research.

This model Agreement for the creation of a LIA was drafted by the Legal Affairs Department and Europe of Research and International Cooperation Department. It is based on a number of Agreements for the creation of LIA executed between the CNRS and international research organisations.

As a model, this Agreement for the creation of an LIA is a negotiation-aid instrument. Some of its provisions may or should be modified according to the purpose of the Agreement, the scientific field, the nature of the partner or any other contextual consideration.

AGREEMENT FOR THE CREATION OF AN INTERNATIONAL ASSOCIATED LABORATORY (LIA)

LIA FORMATH VIETNAM SINGAPORE "LIAFVS"

Between

- The CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, a public scientific and technological institution with headquarters at 3, rue Michel Ange, Paris 75016, France, represented by Professor Antoine PETIT, Chairman – Chief Executive Officer hereinafter referred to as CNRS
- The UNIVERSITÉ DE TOURS, a public scientific, cultural and professional institution with headquarters at 60 rue du Plat d'Etain, 37020 Tours cedex 1, France, represented by Mr. Philippe

VENDRIX, President hereinafter referred to as UT

- The UNIVERSITÉ D'ORLÉANS, a public scientific, cultural and professional institution, with headquarters at Château de la Source, Avenue du Parc Floral, BP 6749, 45067 Orléans Cédex 2, France, represented by Professor Ary BRUAND, President, hereinafter referred to as UO
- The UNIVERSITÉ TOULOUSE 1 CAPITOLE, a public scientific, cultural and professional institution, with headquarters at 2 rue du Doyen-Gabriel-Marty 31042 Toulouse, France, represented by Professor Corinne MASCALA, President hereinafter referred to as UT1C
- The UNIVERSITÉ TOULOUSE JEAN JAURÈS, a public scientific, cultural and professional institution, with headquarteres at 5 allée Antonio Machado, 31058 Toulouse Cedex 9, France, represented by Professor Richard LAGANIER, President hereinafter referred to as UT2J

- The UNIVERSITÉ PAUL SABATIER TOULOUSE 3, a public scientific, cultural and professional institution, with headquarters at 118 route de Narbonne, 31062 Toulouse Cedex 9, France, represented by Professor Jean-Pierre VINEL, President hereinafter referred to as UPS
- The INSTITUT NATIONAL DES SCIENCES APPLIQUÉES DE TOULOUSE, a public research and higher education institution, with headquarters at 135 avenue de Rangueil, 31077 Toulouse Cedex

4, France represented by Professor **Bertrand RAQUET**, Director hereinafter referred to as **INSA Toulouse**

• The UNIVERSITÉ PARIS 13, a scientific, cultural and professional institution, with headquarters at 99 Avenue Jean-Baptiste Clément, 93430 Villetaneuse, France, represented by Professor Jean-

Pierre ASTRUC, President hereinafter referred to as Paris 13

 The UNIVERSITÉ PARIS 8 VINCENNES-SAINT-DENIS, a public scientific, cultural and professional institution, with headquarters at 2 rue de la Liberté, 93526 Saint-Denis Cedex, France, represented by Professor Annick ALLAIGRE, President

hereinafter referred to as Paris 8

CNRS, UT1C, UT2J, INSA Toulouse and UPS acting jointly in their own name and on behalf of: - the Institut de Mathématiques de Toulouse, UMR5219

CNRS, UT and UO acting jointly in their own name and on behalf of:

- the Institut Denis Poisson (IDP), UMR7013

CNRS, Paris 13 and Paris 8 acting jointly in their own name and on behalf of:

- the Laboratoire Analyse, Géométrie et Applications (LAGA), UMR7539

And

• The VIETNAM ACADEMY OF SCIENCE AND TECHNOLOGY, a national research organization, whose registered address is 18 Hoang Quoc Viet, Cau Giay, Ha Noi, Vietnam represented by

Professor CHÂU Văn Minh, President hereinafter referred to as VAST

- The VIETNAM INSTITUTE FOR ADVANCED STUDY IN MATHEMATICS, a national research organization, whose registered address is Ta Quang Buu Library, 1 Dai Co Viet Street, Ha Noi, Vietnam represented by Professor LE Minh Ha, Director hereinafter referred to as VIASM
- The NATIONAL UNIVERSITY OF SINGAPORE, a company limited by guarantee incorporated in Singapore under Companies Act (Cap.50) (Company Registration Number: 200604346E), having its registered office at 21 Lower Kent Ridge Road, Singapore 119077, represented by Professor TAN Eng Chve. President
 - hereinafter referred to as **NUS**
- The NANYANG TECHNOLOGICAL UNIVERSITY, a company limited by guarantee incorporated in Singapore under Companies Act (Cap.50) (Company Registration Number: 200604393R), having its registered office at 50 Nanyang Avenue, Singapore 639798, represented by Professor Subra SURESH, President hereinafter referred to as NTU

VAST acting in its own name and on behalf of:

- the Institute of Mathematics, Hanoi

Hereinafter referred to jointly as the "Parties" or individually as the "Party".

CONSIDERING

The Agreement for scientific and technological Cooperation signed in Hanoi on March 7, 2007 between the Government of the French Republic and the Government of the Socialist Republic of Vietnam.

The Agreement for scientific and technical Cooperation signed in Paris on May 3, 1983 and on November 16, 1998 between the Academy of Science and Technology of Vietnam and the Centre National de la Recherche Scientifique.

The Agreement for the creation of LIA FORMATH Vietnam signed on October 3, 2011 and renewed on December 9, 2015.

PREAMBLE

History of the cooperation and recent developments.

The system of teaching and research in Viet Nam has always maintained links with the French system, despite the vicissitudes. The country has a very good level of basic training in mathematics for several decades. In the 1980's, the major influence on mathematics in Viet Nan was the one of the soviet school. In the 1990's the Vietnamese and French colleagues in France, under the banner of PICS "Formath Vietnam", began to unite dispersed collaborations that existed between the two countries. This was done with the help of the CNRS, the AUF and the Embassy of France in Vietnam. Actions Formath Vietnam had intended in particular to help to attract to the basic science gifted students who might be tempted by the new economic opportunities, has developed scientific cooperation and has diversified the topics carried out in Vietnam.

The first French coordinators of the PICS Formath Vietnam have been Nguyen Thanh Van (Toulouse) and Frederic Pham (Nice), then Jean-Pierre Ramis (Toulouse) later Lionel Schwartz (Paris). The Vietnamese partners were diverse, but three institutions played a major role. The Institute of Mathematics Vietnam (Vien Toan Hoc, section of the VAST), located in Ha Noi, Ha Noi University of Pedagogy (<u>Trường Đại học Sư phạm Hà Nội</u>, or "Ha Noi ENS") and the University of Natural Sciences of National University of Vietnam at Ha Noi and later in Ho Chi Minh City. The mathematicians who work there play an important role in the training of colleagues working in smaller universities (Vinh, Thai Nguyen, Hue, Quy Nhon, Dalat, etc.). Scientific collaborations have been developed in partial differential equations, complex analysis, algebraic topology, singularity theory, commutative algebra, discrete mathematics, probability theory ...

Actions have been international conferences and intensive schools (level M/D) held in Vietnam with significant involvement from French mathematicians, co-advised PhD, travel support, student internships in France. A lot of medium and longterm exchanges of researchers in both directions have also been made possible by this agreement.

These actions are especially active in Ha Noi with the Ha Noi Institute of Mathematics (VAST) and Universities. Different partners in Ha Noi are fully implicated in this program and the Vietnam Institute of Advanced Studies in Mathematics (VIASM) plays a major role in this cooperation. Others universities from centre and south Vietnam (with the help of ICISE, but not exclusively) are also involved in this program, via workshops, conferences in Ha Noi, ... Nevertheless, in these parts of Vietnam, there

were less interactions with French colleagues and the influence of LIA and the variety of developed topics is less important. The north Vietnam is traditionally more interested both in pure and applied mathematics and the south is focused mainly on applied mathematics. A few mathematicians in Ho Chi Minh City have been trained in France but most of them in the United State or the Soviet Union. It was following the pioneering work of Alain Pham that cooperation with the South took a real boom since the 2000s with the work of Michel Zinsmeister and Duong Minh Duc.

Since 2006 and 2008 respectively, two International Masters in Mathematics work in Vietnam, one in Ho Chi Minh City, one in Ha Noi. These courses send about thirty students each year in various universities and "Grandes Ecoles" in France. They form a significant part of the next generation of Vietnamese university teachers and researchers in mathematics.

The "Laboratoire International Associé" Formath Vietnam" (LIAFV) was created in 2011 and renewed in 2015 as a continuation and an amplification of these works by a former PICS. Between 2011 and 2018, the scientific cooperation has been very intensive, and improvements has been realized in the following directions: - an important increase of the number of PhD thesis submitted in France by Vietnamese students,

- a significant number of them have returned to Vietnam to work in the academic system (see below)
- a substantial number of joint publications, many of them partially supported by the LIAFV various activities, including workshops, congresses, ...

The LIAFV has supported activities at the Vietnamese Institute of Advanced Studies in mathematics (VIASM) in Ha Noi and Tuan Chau. An agreement has been signed between VIASM and LIAFV about this.

The LIA provided active support to high level scientific collaborations. To avoid dispersion and to facilitate coordination, these collaborations have been grouped under four main topics.:

- AGT-DM: Algebra, Geometry, Topology, and Discrete Mathematics.
- Analysis and applications, scientific computing.
- Optimization and control.
- Probability, Statistics, Finance.

The LIA attached a major importance to the development of cooperation in applied mathematics, this will be also a priority for the next few years. Main objectives are to develop modelling, probability and statistics. The master in Ho Chi Minh City has a special role to play in this context, in order to develop direct interactions between mathematics and the "real" world.

The LIA will continue to support research visits to France and Vietnam, masters and it focus on the supervision of theses. It will promote the development of conferences, summer schools and will support also to CIMPA schools.

Thematic **workshops** and **summer schools** will be organized regularly, possibly as part CIMPA or Do Son schools. Support to SEAMS school will be prided. As well, and as it is said above support will be given to the special periods in VIASM.

Masters and students exchanges

The Ha Noi Master (MIM). Students take the one year of M1 with some of the courses provided by French visitors in Ha Noi. A Franco-Vietnamese jury determines whether students will be allowed to go to France to follow the M2 (scholarships are presently provided by various labex, Vietnamese grants are to come). The Master of Ha Noi is operated by the Institute of Mathematics (VAST) and the Pedagogical University. Students may continue their M2 in a dozen partner universities in France (Paris 6, Paris 11, Paris 13, Toulouse, Rennes, Strasbourg, Nice, …; universities of Toulouse and Paris represent half of the flow).

The Master of Applied Mathematics in Ho Chi Minh City. Initiated in 2007 by the French University Centre (PUF), it takes place at the University of Natural Sciences of Ho Chi Minh City. This master is delivered by several partners in France (Universities of Orléans and Tours, Paris 13, Rennes and Lorraine) and there is partnership with the Ecole Polytechnique. French teachers give five lectures during the first semester; two other courses are taught given by the Vietnamese part. The best students come to France during the second semester to carry out their internship. In 2018, it is the 12th class (about 20 students each year); about one hundred PHD thesis have been defended during the decade. It should be noted that more and more students in the sector "Honours" (highest class) in HCMC, which has traditionally turned to the U.S. follow now this master, assuring him of recruitment of high level. In addition, this master has now established a lasting and Paris 13. The University of Nantes is presently developing a cooperation with the VNU Ha Noi. The University of Marseille is developing a master in probability with Quy Nonh.

Role of the LIA in training Master level

The LIA wss intended to assist the development of both existing masters (the Master International Ha Noi and the HCMC master of applied mathematics) with a coordination for the selection of French teachers and the management of the French side of these masters. With its national wide coverage, the LIA will allow the cooperation of new centers with these Masters. It will play a role in guiding students towards M2 France for international master, and in their choice of training place for students of Master in HCMC. LIA helped colleagues in Viet Nam to develop thematic coordination between the North and the South. It should be reminded here that the development of applied mathematics is a priority of LIA.

PhD students:

The flow of PhD students coming to France is high, due to

- the masters mentioned above,
- the demand of Vietnamese mathematicians to develop new areas,

- the existence of lasting research relations in various fields.

The research for doctoral students.

The LIA will not have its own scholarships nevertheless, it will help students in their researches for such

scholarships and will follow the "flow of doctoral students" (about 25-30 per year). It will

- ensure as much as possible the coordination between the parties,
- guide students in their choice,
- show them ways to find scholarships,
- follow them during and after the thesis,
- try to seek support from companies including scholarships.

In the region, strong collaborations also involve Singapore, both with France (many researchers who either defended a thesis in France, or even had a permanent position in France, have now a permanent position in Singapore, and maintain strong links with France) and Vietnam (many MOUs have been signed between VIASM, VAST or Vietnamese universities and NTU or NUS). The LIA appears to be a good tool to give an umbrella The presence of the new partner "Singapore" in the LIA will offer opportunities to develop collaborations at high level in the four main topics mentioned above. The aim is also to reinforce the connections between Vietnam and Singapore, which are the principal actors in mathematics in South East Asia. This collaboration has also to be developed at the training level (master, PHD and postdoc). Recently, the creation of a UNESCO center in Hanoi, which mission is to boost the training in math at master and PhD level of the region, and the driving role of Singapore in research and training also legitimate it ; the new dimension of the LIA, extended to Singapore, is then an opportunity to structure training and increase the flow of exchanges of students and researchers between France, Viet Nam and Singapore.

Consequently, the Parties agree, on the basis of this Agreement (hereinafter referred to as the "Agreement"), to establish an "International Associated Laboratory - LIA" which is governed by the following provisions.

CHAPTER I - CREATION, TERM, NAME, PURPOSE AND COMPOSITION

Article 1 - Creation and term:

The creation of the LIA shall be effective on January the 1st, 2019 for a term of four (4) years.

Article 2 – Name

The LIA is called "LIA FORMATH VIETNAM SINGAPORE". Its abbreviation is "LIAFVS".

Article 3 – Purpose

The main objectives of the International Associated Laboratory are:

- 1. to structure and federate scientific relations;
- 2. to establish permanent links with the future Institute of Advanced Studies in Hanoi; 3. to provide discussions and work between Vietnamese and French researchers;
- 4. to boost doctoral and postdoctoral collaborations, including:
- 5. to promote the management of a joint PhD doctoral Vietnamese candidates
- 6. to promote the coordination of international masters in Vietnam and create a Graduate School;
- 7. to stimulate the creation of Vietnamese-French research teams, and develop synergies between researchers from Vietnam;
- 8. to organize annually a seminar or congresses in Vietnam.

The purpose of the LIAFV collaboration is to implement the scientific program described in Appendix 1, which is an integral part of this Agreement.

Article 4 - Composition

The following laboratories and teams are involved in the LIA:

- the "Institut Denis Poisson" (IDP), UMR7013
- the « Institut de Mathématiques de Toulouse », UMR5219,
- the « Laboratoire Analyse, Géométrie et Applications » (LAGA), UMR7539
- the Institute of Mathematics (VAST)
- the Vietnam Institute for Advanced Study in Mathematics (VIASM)
- the Department of Mathematics, National University of Singapore (NUS)
- the School of Physical and Mathematical Sciences, Nanyang Technological University (NTU)

Article 5 – Nature of the cooperation

The LIA is not a legal entity and has no legal capacity.

It is not the purpose nor effect of the Agreement, and nothing herein may be construed in this respect, to form, create, make effective or even acknowledge the creation of a joint venture, a mandate, a company, and interest group or any other commercial group or entity, or a *de facto* company between the Parties.

CHAPTER II - ORGANISATION OF THE LIA

Article 6 – Scientific coordinators

The LIA is coordinated by three (3) scientific coordinators. Scientific responsibility and management of the Program are assumed jointly by:

- Mr Phung Ho Hai, Institute of Mathematics, VAST
- Mr Zhu Chengbo, National University of Singapore, NUS
- Mr Marc Peigne, Université de Tours

Together they shall coordinate the LIA's Program, the provisional budget and the annual financial and scientific reports to be submitted to the Steering Committee.

A Steering Committee is formed, composed of:

- the Director of the "Institut de Mathématiques de Toulouse" of CNRS or his/her representative
- a representative of the French universities chosen in agreement between the parties
- a representative of VAST
- a representative of VIASM
- a representative of NUS
- a representative of NTU

All members possess equal voting rights.

Each representative may be assisted by the expert of his/her choice at meetings of the Steering Committee, subject to the signing of a non-disclosure agreement. These experts attend in an advisory capacity.

The scientific coordinators of the LIAFV attend Steering Committee meetings in an advisory capacity.

7.2. Chairman

The Steering Committee is chaired by one of its members who is appointed for a term of two years The Chairman reports to the Parties on the results obtained and use of the financial resources.

7.3. Meetings

The Steering Committee meets at least once a year at the initiative of its Chairman and at the request of the scientific coordinators whenever the interest of the LIAFV so dictates.

The decisions of the Steering Committee are adopted by a unanimous vote from present or represented members, with quorum being set at ³/₄ of its members (or *when each Party is represented*).

Should it be impossible to physically hold a Steering Committee meeting, decisions of the Steering Committee may be adopted by teleconferencing or by written consultation.

7.4. Role

The Steering Committee:

- gives an opinion on the progress, program and direction of research;
- decides as to the budgetary resources required for the LIAFV's operations;
- reports to the Parties, through its Chairman, on the results obtained and the use of the financial resources.

As and when required, it drafts the by-laws of the LIAFV. It may also address any other question relating to the LIAFV.

Article 8 – Scientific committee

8.1. Definition

A scientific committee is formed, composed of four French representatives, four Vietnamese representatives, and four Singaporean representative. The composition of the committee reflects the key links between France, Vietnam and Singapore in mathematics. It reflects the activities from the north of Vietnam and from the south of Vietnam, from French teams who are involved in the cooperation, and from NUS and NTU in Singapore.

8.2. Chairman

The Chairman is proposed by the coordinators.

8.3. Meetings

The committee meets on request of the president or of the coordinators and at least one time a year (by electronic means if necessary).

8.4. Role

The scientific committee helps the coordinators to organize the life of the laboratory, and to prepare annual report to the steering committee, it gives scientific advices on requests of members of the LIA.

CHAPTER III – FINANCIAL AND HUMAN RESOURCES

Article 9 – Financial provisions

Every year, the provisional budget required to carry out the Program shall be prepared by the scientific coordinators and shall be submitted to the Steering Committee for approval. This budget includes stated requirements as well as the corresponding resources, detailed by the Parties funding them.

Annex 2, which is an integral part of the Agreement, summarises the provisional budget for the first year of the LIA, which detail, in particular, the Parties' contributions and the suggested use of the funds. It is updated every year by a decision of the Steering Committee.

Nevertheless, the Parties would make their best efforts to maintain an equivalent level of financial resources for subsequent years.

Each Party allocates and manages the budgetary credits corresponding to its own funding.

As well as these financial resources, each Party manages, under its own responsibility and own authority, and according to its own rules, all the resources which it provides pursuant to the LIA: equipment, premises, facilities and staff.

Once a year, each Party shall justify to the other Parties, the resources actually allocated during the previous year (including equipment, premises and staff) in respect of the LIA. To this end, each Party draws-up a review of the financial resources allocated and their use (expenditure).

Use of the funding made by each scientific coordinator for the LIA Program may be verified at the year-end following an ordinary request from an authorised representative of the other Party. The credits used by each scientific coordinator for the LIA are subject to the usual controls in the respective countries so as to verify their compliant use in accordance with the Agreement.

Article 10 – Staff

The staff solicited by the scientific coordinators to contribute to the Program shall remain fully attached to their original organisation and carry out their work on the basis of instructions from their superiors. The scientific coordinators discuss on the terms and conditions, schedule and scope of the involvement of these employees in the implementation of the Program. Annex 3 summarises this involvement for the first year

of existence of the LIA. The Parties shall be immediately informed of any changes and Annex 3 be updated.

Use of the infrastructures and/or equipment by the Parties' staff is subject to compliance with the health and safety rules established by the owner Party.

For the purposes of the LIA, the staff of a Party may have access to the other Parties' premises, subject to compliance with the by-laws of the Party controlling the premises and possibly to the signing of a hosting agreement.

Article 11 – Research contracts

The research contracts that the different parties wish to establish with public or private organisations, within the framework of the LIA, are signed by all the Parties.

They are negotiated by one of the Parties as designated by the Steering Committee. The authorised Party keeps the other Parties informed of the results of the negotiations. The latter have fifteen (15) days to provide their opinion on the final draft. Subsequent to this period, opinion is deemed to be favourable.

Research contracts are managed by the Party which conducted negotiations. Nevertheless, the Steering Committee may wish another Party to manage one or more contracts. In this case, it shall inform each Party.

Non-disclosure clauses in these research contracts shall not prevent the relevant researchers from being entitled to mention their work in their activity report, which does not represent disclosure within the meaning of intellectual property legislation.

Research contracts shall explicitly include provisions for general expenses to be incurred by the host laboratories where the contractual activities shall be performed. The corresponding amounts, which will be fixed jointly by the Parties involved, shall be reflected in the provisional budget submitted to the Steering Committee pursuant to Article 8.

For research contracts managed by the CNRS and including staff expenses, a deduction, representing a provision for redundancy, is made on the compensation, exclusive of taxes, but including social security and employer contributions.

CHAPTER IV – INTELLECTUAL PROPERTY

Article 12 - Publications

Each Party undertakes to provide the other Parties with all the information required for carrying-out joint research work. Scientific results shall be published according to the usual custom and practice of the scientific community.

Publications related to the work carried-out in common within the framework of the LIA shall mention the connection with the Parties of the LIA. They shall include the words "*Research conducted within the context of the International Associated Laboratory LIA FORMATH VIETNAM SINGAPORE*".

Any and all publication related to the work carried-out in common within the LIA shall be subject, during the term of this Agreement and for two years after its expiry date, to the agreement of the other Parties which shall notify their written decision within two months of receipt of the draft publication at the latest. Thereafter and in the absence of an objection, agreement shall be deemed to have been given.

Consequently, all draft publications are referred for the opinion of the other concerned Parties which may remove or change certain information, the disclosure of which could compromise industrial and commercial use, under optimum conditions, of the results of the work carried-out in common within the LIA. Such removals or changes shall not compromise the scientific value of the publication.

Article 13 – Confidentiality

The Parties undertake to ensure that the information exchanged pursuant to the LIA and identified as confidential (hereinafter referred to as the "Confidential Information"):

- a) is kept strictly confidential and is protected to the same extent as their own Confidential Information;
- b) is only provided to their members of staff requiring knowledge thereof and is only used in application of this Agreement.

Any and all other communication or use of the Confidential Information is subject to the prior and written authorisation of the communicating Party. Each Party undertakes to ensure that its staff referred to in section b) hereinabove comply with the provisions of this Agreement.

These provisions shall remain in force for a period of five years after the termination of the Agreement.

Notwithstanding the foregoing provisions, each Party may provide Confidential Information for which it is able to prove:

- that it was in the public domain prior to its communication or subsequent thereto, but without any breach being attributable to it;
- that it was received legally from a third party;
- that it was already in its possession prior to the execution of the Agreement;
- that it was developed independently and in good faith by its members of staff who did not have access to said Confidential Information.

Moreover, these provisions may not preclude:

- either the obligation binding on all personnel involved in the Program to provide an activity report to its institution, such communication does not represent disclosure within the meaning of intellectual property legislation;
- or the defence of the thesis related to the Program of this Agreement, with such defence being organised whenever necessary so as to guarantee, in compliance with effective university regulations, the confidentiality of certain results of the works carried-out pursuant to the Program.

Article 14 - Results

14.1. Ownership of results

The results, whether patentable or not, hereinafter referred to as the "Results", which are obtained pursuant to the Agreement are the equal property of the Parties, hereinafter referred to as the "Joint Owners".

Each Joint Owner retains ownership of the knowledge acquired by it outside this collaboration.

14.2. Appointment of an Administrator for the protection and exploitation of the Results

The Joints Owners designate among them an Administrator Institution (hereinafter referred as to "Administrator") to be in charge of the protection and the exploitation of the Results, taking into account the expertise, the relevance of the intellectual property portfolio already owned by each Joint Owner.

Nevertheless, a French Party (hereinafter referred as to the "Mandatory") is designated in accordance with the French law to represent the French Parties Joint Owners. The Mandatory will be able to rely on a third party to accomplish all or part of its missions according to existing contracts it made with this third party.

14.3. Protection of the Results by patent

Patent applications are filed by the Administrator in the joint name of the Joint Owners; the name of the inventor(s) shall be mentioned.

The Administrator has an express mandate from the other Joint Owners so as to manage the filing of patent applications and for obtaining and maintaining the resulting patents.

The Administrator assumes responsibility for steering and monitoring the priority filing procedures. It shall keep the other Joint Owners, represented by the Mandatory when

appropriate, informed of the progress of the application and provides the list of foreign countries in which extensions shall be filed.

Should one of the Joint Owners waive entitlement to file or maintain a patent and/or part of the extensions effective, it shall advise the other Joint Owners, represented by the Mandatory when appropriate, thereof within a reasonable timeframe so that they may continue lonely the procedure.

In addition, the waiving Joint Owner undertakes to sign or get signed all documents enabling the other Joint Owners to become sole owners of the said patent(s); the Joint Owners which continue with the procedure shall be the sole beneficiaries of any income generated by use of the patent in the countries for which the other Joint Owner waived entitlement to continue with the procedure.

The expenses relating to filing, the issuing procedure, keeping effective and extending patents (hereinafter designed as "Costs of intellectual property") are supported by the Administrator.

14-4. Legal proceedings relating to patents

All the Joint Owners shall inform each other of any action for infringement by a third party against the Results, a declaration of invalidity, a claim or infringement of the Results by a third party.

All the Joint Owners shall act together to jointly agree on the strategy to adopt and shall supply each other with all the evidence in their possession permitting an evaluation of the nature of the dispute.

In the event of it not being possible to obtain a consensus, each of the Joint Owner may on its own and at its own expense take the actions which appear to it appropriate, it being understood that in this event, any compensation resulting from such actions ordered by the court shall wholly and irrevocably be the property of the Joint Owner acting.

14-5. Exploitation of the Results

The Administrator receives an express mandate from the other Joint Owners, to carryout all exploitationrelated work. In particular, it negotiates contracts on behalf of the Joint Owners with all companies wishing to exploit the Results.

The Administrator shall keep the other Joint Owners, regularly informed of the results of the negotiations. Any licensing agreement shall be signed by all the Joint Owners represented by the Mandatory, when appropriate.

After deduction of the Costs of Intellectual Property from the incomes resulting from the exploitation of the Results, the Administrator shall repay to the Joint Owners represented by the Mandatory, when appropriate a proportion of the royalties resulting from the exploitation of the Result(s), less a contribution to the exploitation expenses of the Administrator representing a maximum of 20% of gross incomes.

14-6. Software and databases

Each Party remains sole owner of the software and databases obtained by it outside the framework of the LIA.

The software and its extensions, and the databases, which are obtained in the framework of the LIA are the joint property of the Parties.

The Parties have a free and non-assignable right-of-use over this software and databases for the research purposes alone or with third parties. For databases, the right-of-use relates to both the structure and content and includes an extraction right.

In the event of the granting of rights-of-use to third parties over the software and databases obtained in the framework of the LIA, the royalties received in this respect shall be shared equally between the Parties by the Administrator.

CHAPTER V – MISCELLANEOUS PROVISIONS

Article 15 – Renewal – Assessment

The Agreement may be renewed by written amendment.

At any time, the Parties may agree to form an ad hoc committee, in particular, in the event of the renewal of the LIA, in order to assess the LIA's activities and to make recommendations to its Program.

Article 16 – Adhesion, termination, withdrawal and exclusion

16.1. Adhesion

The Steering Committee may accept new laboratories or Parties in the LIA.

The adhesion of new Parties to the LIA requires the signing of an adhesion amendment to the Agreement and becomes effective on the date of such signature. Subject to a unanimous decision from the Steering Committee concerning the adhesion application, the Parties grant a mandate to the CNRS to sign the adhesion amendment in the name of all the signatory Parties of the Agreement.

All the Parties shall be informed of any new adhesion application (laboratory or Party).

16.2. Termination

In the event of an unresolved dispute, the Parties may decide by joint agreement to terminate the Agreement before its term.

16.3. Withdrawal

Any Party may withdraw from the LIA with six (6) months' notice given by registered letter with acknowledgement of receipt. The Steering Committee shall approve the financial conditions of the withdrawal.

16.4. Exclusion

In the event of insufficient involvement in achieving the targets of the LIA or a Party's breach of its obligations, a Party may be excluded from the LIA by a unanimous decision of the Steering Committee; the concerned Party does not take part to the vote.

Article 17 – Liability

Each Party remains liable, without right of action against the other Parties, with the exception of cases of gross or intentional negligence, for repairing damage to its own property owing to, during the performance of this Agreement.

Should damage be caused to physical assets acquired by the Parties under this Agreement, the latter shall pay the repair or replacement charges for said assets on a pro rata basis of their respective financial contributions to the acquisition thereof.

According to the rules of ordinary law, each Party is liable for damage / loss of any nature caused to third parties during the performance of this Agreement.

Article 18 – Final provisions

The provisions of Chapter IV shall survive notwithstanding the expiry or termination of the Agreement or the withdrawal or exclusion of one of the Parties involved in this collaboration.

All research activities conducted in connection with the LIA shall be done in compliance with all the applicable laws, regulations, and guidelines of the countries and institutions in which the research is conducted.

The Parties shall endeavour to settle their differences out of court in an amicable way.

Should they fail to do so, any disputes may be settled before the defendant's domicile jurisdiction.

The Agreement is drafted in nine (9) originals, in English.

In

For the Centre National de la Recherche Scientifique

, on

Antoine PETIT Chairman – Chief Executive Officer

In

, on

For the Université de Tours

Philippe VENDRIX

President

For the Université d'Orléans

Ary BRUAND,

President

For the Université Toulouse 1 Capitole

Corinne MASCALA, President

For the Université Toulouse Jean Jaurès

Richard LAGANIER President

For the Université Paul Sabatier Toulouse 3

Jean-Pierre VINEL President

For the Institut National des Sciences Appliquées

Bertrand RAQUET Director

In

, on

For the Université Paris 13

Jean-Pierre ASTRUC President In

, on

For the Université Paris 8 Vincennes-Saint-Denis

Annick ALLAIGRE

President

In

, on

For the Vietnam Academy of Science and Technology

CHAU Van Minh President

In

, on

For the Vietnam Institute for Advanced Study in Mathematics

LE Minh Ha

President

, on

For the National University of Singapore

In

TAN Eng Chye President

In

, on

For the Nanyang Technological University

Subra SURESH President

ANNEX 1: Scientific Program

LIA FORMATH VIETNAM

Review of cooperation, prospects

1. History of cooperation and recent developments.

The system of teaching and research in Viet Nam has always maintained links with the French system, despite the vicissitudes. The country has a very good level of basic training in mathematics for several decades. In the 1980's the major influence on mathematics Vietnamese was the one of the soviet school. In the 1990's the Vietnamese and French colleagues in France began to unite under the banner of PICS "Formath Vietnam" dispersed cooperations that existed between the two countries. This was done with the help of the CNRS, the AUF and the Embassy of France in Vietnam. Actions Formath Vietnam had intended in particular to help to attract to the basic science gifted students who might be tempted by the new economic opportunities, has developed scientific cooperation and has diversified the topics carried out in Vietnam.

The first French coordinators of the PICS Formath Vietnam have been Nguyen Thanh Van (Toulouse) and Frederic Pham (Nice), then Jean-Pierre Ramis (Toulouse) later Lionel Schwartz (Paris). The Vietnamese partners were diverse, but three institutions played a major role. The Institute of Mathematics Vietnam (Vien Toan Hoc, section of the VAST), located in Ha Noi, Ha Noi University of Pedagogy (<u>Trường Đại học Sư</u> pham Hà Nội, or "Ha Noi ENS") and the University of Natural Sciences of National University of Vietnam at Ha Noi and later in Ho Chi Minh City. The mathematicians who work there play an important role in the training of colleagues working in smaller universities (Vinh, Thai Nguyen, Hue, Quy Nhon, Dalat, etc.). Scientific collaborations have been developed in partial differential equations, complex analysis, algebraic topology, singularity theory, commutative algebra, discrete mathematics, probability theory ...

Actions have been international conferences and intensive schools (level M/D) held in Vietnam with significant involvement from French mathematicians, co-advised PhD, travel support, student internships in France.

These actions are especially active in Ha Noi with the Ha Noi Institute of Mathematics (VAST) and Universities. Different partners in Ha Noi are fully implicated in this program and the Vietnam Institute of Advanced Studies in Mathematics (VIASM) plays a major role in this cooperation. Others universities from centre and south Vietnam (with the help of ICISE, but not exclusively) are also involved in this program, via workshops, conferences in Ha Noi, ... Nevertheless, in these parts of Vietnam, there were less interaction with French colleagues and the influence of LIA and the variety of developed topics is less important. The North Vietnam is traditionally more interested both in pure and applied mathematics and the south is focused mainly on applied mathematics. A few mathematicians in Ho Chi Minh City have been trained in France but most of them in the United State or the Soviet Union. It was following the pioneering work of Alain Pham that cooperation with the South took a real boom since the 2000s with the work of Michel Zinsmeister and Duong Minh Duc.

Since 2006 and 2008 respectively, two International Masters in Mathematics work in Vietnam, one in Ho Chi Minh City, one in Ha Noi. These courses send about thirty students each year in various universities

and "Grandes Ecoles" in France. They form a significant part of the next generation of Vietnamese university teachers and researchers in mathematics.

The "Laboratoire International Associé" Formath Vietnam was created in 2011 as a continuation and an amplification of these works by the former PICS. In the next appendices results of the cooperation between 2011 and 2014 is shown. It shows:

- an important increase of the number of PhD thesis submitted in France by Vietnamese students,
- a significant number of them have returned to Vietnam to work in the academic system (see below)
- a substantial number of joint publications, many of them partially supported by the LIAFV
- various activities, including workshops, congresses, ...

This is also shown below

- the LIAFV has supported activities at the Vietnamese Institute of Advanced Studies in mathematics (VIASM) in Ha Noi and Tuan Chau. An agreement has been signed between VIASM and LIAFV about this

This is described in more details below. It is worth to note the implication of new colleagues on both sides, and that a new generation is there.

2. Subjects, future developments

The International Associated Laboratory Formath continues and expands this cooperation. We will describe below the main collaborations by bringing together scientific topics.

The LIA provides active support to high-level scientific collaborations. To avoid dispersion and to facilitate coordination, these collaborations have been grouped under four main topics. The LIA attaches a major importance to the development of cooperation in applied mathematics, this will be a priority for the next few years. Main objectives are to develop modelling, probability and statistics. The master in Ho Chi Minh City has a special role to play in this context, in order to develop direct interactions between mathematics and the "real" world.

These four main topics (fields) are:

- AGT-DM: Algebra, Geometry, Topology, and Discrete Mathematics.
- Analysis and applications, scientific computing.
- Optimization and control.
- Probability, Statistics, Finance.

Each topic involves potential applications.

2.1 AGT-DM (Algebra, Geometry, Topology, Discrete Mathematics) There

are essentially four active topics in this team described below.

Singularity theory, algebraic geometry

Local singularities: index of vector field, differential forms on singular varieties, local Euler obstruction. Global singularities and characteristic classes of singular varieties, properties and topological applications of multivariate polynomial real or complex, global monodromy, singularity at infinity. Relationship between intersection homology and cyclic homology. Newton trees, Jacobian conjecture.

Commutative algebra

Problems on local algebra cohomology and local finiteness of local cohomology modules, finiteness of the first set of ideals associated Macaulayfication.

Rings Rees monomials ideals, toric rings parameterized by monomials and their interaction with combinatorics.

Castelnuovo-Mumford Regularity, structure of projective curves, Groebner basis, cocommutative (regular) algebra. Several studies are underway in the fields above.

Algebraic Topology

Stable homotopy of spheres and Singer's transfer.

Modular Representations of symmetric groups and linear groups, properties of Lannes' T-functor. Injective resolutions of unstable modules, applications to computations of homotopy groups. Cohomology of functors (Mac Lane cohomology)

Discrete mathematics

Graph Theory: Studying the structures of graphs to model networks of distributed systems, bioinformatics,

ecology, social networks, Tutte polynomial and recurrent configurations, rotor router model. Discrete

dynamical systems: the ordered structures and algebraic structures of dynamical systems as models of

sand piles, the ChipFiring Games. Editing graphs.

2.2. Analysis and Applications, Scientific Computing

Complex analysis

-Theory of infinite dimensional holomorphy and analysis of properties of topological vector spaces.

-The Kobayashi (pseudo)-metric, extensions of functions or maps and holomorphic invariants of the boundary of domains in Cⁿ. Lempert function and Nevanlinna-Pick type problems of interpolation. -Polynomial approximation in the complex case. Pluri-potential theory and plurisubharmonic functions. Singularities.

Theoretical nonlinear PDE / inverse problems

Applications of mathematics to physics and biology (theory of potential in areas with irregular edges, as porous material or polymer solutions., geometry of DNA molecules,...)

Dynamical systems

Holomorphic dynamics in several variables Algebraic differential equations (from theory to their numerical solutions)

High performance computing.

It is a subject that emerges only in Vietnam, in particular with a course on the subject taught in the master in Ho Chi Minh City.

2.3. Optimization and Control

Optimal mass transport Numerical Optimization Variational inequalities and problems associated; Non-Regular Dynamical Systems and Applications; Multi-criteria-optimization, global optimization (theory and algorithms); Optimal control of non-smooth systems; Convex analysis, non-smooth analysis and applications (Metric regularity, Newton's methods for generalized equations).

2.4 Probability, Statistics, Finance

We present this area into four sub-domains, "Ergodic Theory and probability theory", "Statistics", "Stochastic processes/Financial Mathematics" and "Mathematics for biology".

Ergodic Theory and probability theory

Ergodic theorems, cocycles and fluctuations, Random walks in fixed and random environment, Iterated functions systems, Galton-Watson processes in fixed and random environment

Statistics

Statistics in Medicine, Statistical Physics, Renewable Energy, Applied statistics (nonparametric statistics, ...)

Stochastic processes and Financial Mathematics

Stochastic processes, numerical methods and related topic, Probability theory, with applications in insurance and finance

Mathematics for biology

Mathematical Modelling Techniques for Biological Systems and population dynamics , mathematical population genetic, Branching Processes

3. Actions of the LIAFV

3.1. Scientific collaborations

The LIA provides support to active scientific collaborations of high quality. To do this it supports research visits to France and Vietnam, masters and it focuses on the supervision of theses. It promotes the development of conferences, summer schools and provides support to CIMPA schools.

3.2. Conferences and schools

Thematic workshops and summer schools are organized regularly, possibly as part CIMPA or Do Son schools. Support to SEAMS school will be prided. As well, and as it is said above support will be given to the special periods in VIASM.

3.3. Masters and students exchanges

Description

The Ha Noi Master (MIM). Students take the one year of M1 with some of the courses provided by French visitors in Ha Noi . AFranco-Vietnamese jury determines whether students will be allowed to go to France to follow the M2 (scholarships are presently provided by various labex, Vietnamese grants are to come). The Master of Ha Noi is operated by the Institute of Mathematics (VAST) and the Pedagogical University. Students may continue their M2 in a dozen partner universities in France (Paris 6, Paris 11, Paris 13,, Toulouse, Rennes, Strasbourg, Nice, ...; universities of Toulouse and Paris represent half of the flow).

The Master of Applied Mathematics in Ho Chi Minh City. Initiated in 2007 by the French University Centre (PUF), it takes place at the University of Natural Sciences of Ho Chi Minh City. This master is delivered by several partners in France (Universities of Orléans and Tours, Paris 13, Rennes and Lorraine) and there is partnership with the Ecole Polytechnique. French teachers give five lectures during the first semester; two other courses are taught given by the Vietnamese part. The best students come to France during the second semster to carry out their internship. In 2018, it is the 12th class (about 20 students each year); about one hundred PHD thesis have been defended during the decade. It should be noted that more and more students in the sector "Honours" (highest class) in HCMC, which has traditionally turned to the U.S. follow now this master, assuring him of recruitment of high level. In addition, this master has now established a lasting and Paris 13.

The University of Nantes is presently developing a cooperation with the VNU Ha Noi. The University of Marseille is developing a master in probability with Quy Nonh.

Role of the LIA in training Master level

The LIA is intended to assist the development of both existing masters (the Master International Ha Noi and the HCMC master of applied mathematics) with a coordination for the selection of French teachers and the management of the French side of these masters. With its nationwide coverage, the IA will allow the cooperation of new centres with these Masters. It will play a role in guiding students towards M2 France for international master, and in their choice of training place for students of Master in HCMC. LIA helps the vietnamese colleagues to develop thematic coordinations between the North and the South It should be recalled here that the development of applied mathematics is a priority of LIA

PhD students :

The flow of PhD students coming to France is high, due to

- the masters mentioned above,
- the demand of Vietnamese mathematicians to develop new areas,

-the existence of lasting research relations in various fields.

The research for for doctoral students. The LIA will not have its own scholarships nevertheless, it will help students in their researches for such scholarships and will follow the "flow of doctoral students" (about 2530 per year). It will

- ensure as much as possible the coordination between the parties,
- guide students in their choice,
- show them ways to find scholarships,
- follow them during and after the thesis,

- try to seek support from companies including scholarships.

Consolidated projected budget as of January 1st 2019

Pays	Institution		nancées en éraire	Montant (€)	Apport en nature (si applicable)		Equivalent temps plein ou personnemois
		X Opérations	V Autor			X Chercheur	
	CNRS	X Opérations X □ Equipement (spécif X Mobilité		tre 21 k€		X Postdoc	
	UNITO .					X Doctorant	
						Support	
	UO					X Chercheur	
France	and UT	Equipement X Mobilité	X Autre	6k€		X Postdoc	
			(specifier)			X Doctorant	
	(Inst. D. Poisson)			1		□ Support	
		X Opérations	X Autre	e ke		X Postdoc	
	Toulouse,	Equipement	uipement (spécifier)	6 k€		X Doctorant	

UTPS (Inst. Math.	X Mobilité		□ Support	
Toulouse)				
			X Doctorant	
			Support	

LIA FVS

	Paris 13 et Paris 8	X Opérations Equipement X Mobilité	X Autre (spécifier)	6k€	X Chercheur X Postdoc X Doctorant Support
	LAGA				
Vietnam	X Opérations	X Opérations		k€	X Chercheur
			X Autre (spécifier)		X Postdoc
	V/(01	Equipement			X Doctorant
		X Mobilité			□ Support
		X Opérations	X Autre		X Chercheur
	VIASM		(spécifier)	k€	X Postdoc
		Equipement			X Doctorant

		X Mobilité			□ Support
Singapore		X Opérations		k€	X Chercheur
	NUS Equipement (spécifier) X Mobilité X Opérations NTU Equipement (spécifier) X Autre (spécifier) X Autre (spécifier)				X Postdoc
			(specifier)		X Doctorant
		X Mobilité			Support
		X Opérations	V Autro		X Chercheur
		1	k€	X Postdoc	
			(specilier)	inc.	X doctorant
		X Mobilité			□ Support

ANNEX 3:

Composition of the laboratories / teams at 1 January 201

Country	SIGNATORY Institution	UNITY / TEAM	STAFF	GRADE	Time devoted to the LIA %)
	CNRS	IDP UM7013	Permanent Kilian Raschel	CR	10%
FRANCE	UNIV ORLEANS	IDP UMR7013	Romain Abraham Michel Zinsmeister FrançoisJames Pierre Debs Stéphane Cordier Marhuerite Zani Pierre Andreoletti Jean-Philippe Anker Julien Barré Athanasos Batakis Niels Berglund Maîtine Bergounioux Laurent Delssol Richard Emilion Sandrine Grellier Luc Hillairet Simona Mancini Magali Ribot	PR PR MCF PR MCF PR MCF PR PR Em MCF PR PR PR PR PR PR PR PR PR PR PR PR	20 % 20 % 20 % 10% 10% 10% 10% 10% 10% 10% 10% 10% 10
	UNIV TOURS	IDP UMR7013	Marc Peigné Guy Barles Florent Malrieu Kilian Raschel Emmanuel Chasseigne Boris Andreianov Olivier Durieu Jean-Baptiste Gouéré Luc Molinet Yves Belaud Emmanuel Humbert	PR PR CR MCF PR MCF PR PR MCF PR	20% 10% 10% 10% 10% 10% 10% 10% 10%

	Tien Zung Nguyen	PR 20%
	Pascal Thomas	PR 20%
	Christine Thomas	PR 10%
	Stéphane Villeneuve	MCF 10%
	Jean-Marc Azais	PR 10%
	Jean-Marc Bouclet	PR 10%
UT1C, UTJJ,	Jean-Paul Calvi	MCF 10%
INSA Toulouse	Jean-Yves Dauxois	PR 10%
UTPS	Fabrice Gamboa	PR 10%
	Vincent Guedj	PR 10%
UMR5219	Radu Ignat	PR 10%
	Jean-Baptiste Lasserre	DR 10%
	Dan Popovici	MCF 10%
	Jasmin Raissy	MCF 10%
	Ahmed Zeriahi	PR 10%
	Monique Pontier	PR 10%
	Benoît Truong Van	PR 10%
	Jean-Stéphane Dhersin	PR 20%
	Lionel Schwartz	PR 20%
UNIV. PARIS	Pascal Omnes	PAST 20%
NORD	Marc Bonino	MCF 10%
	Bérengère Delourme	MCF 10%
UNIV	Linda El Alaoui	MCF 10%
VINCENNES-	Grégory Ginot	PR 10%
SAINT-DENIS	Laurence Halpern	PR 10%
	Jérôme Le Rousseau	PR 10%
UMR7539	Alain Rousseau	Prag 10%
	Philippe Souplet	PR 10%
	Hatem Zaag	DR 10%

	VAST	Permanent Phung Ho Hai, Ta Thi Hoai An Phan Thị Hà Dương The Luc, ass. Ngo Viet Trung, Le Tuan Hoa, Phan Ha Duong Pham Hoang Hiep, Nguyen Dong Yen Vu Ngoc Phat, Nguyen Tu Cuong Don Thai Son Nguyen Duy Tan Nguyen Minh Tri	PR Ass.PR PR PR PR PR PR PR PR CR PR CR PR CR PR	20% 10% 10% 20% 20% 20% 10% 10% 20% 15% 10%
Vietnam	VIASM	PermanentLe Minh HaNon-permanentNguyen Viet DungNguyen Huu DuNgo Long HoangDinh Si TiepLe Hai YenDinh The LucNguyen Huu Viet HungLe Quy ThuongLe VyNguyen The CuongPhan Van TuanSi Duc QuangTran Van TanDo Duc ThaiLuong Dang KyHuynh Van NgaiNguyen Thi Phuong ChiNguyen Dang Ho HaiTran Quang HoaPham Ngoc AnhPham Tien SonNguyen Le Chi QuyetHa Huy Vui	Ass.PR PR PR PR CR CR PR PR CR CR CR Ass.PR Ass.PR Ass.PR CR CR CR CR CR CR CR CR CR CR CR CR CR	20% 20% 20% 20% 20% 20% 20% 20% 20% 20%

	Nguyen Duy Tan Nguyen Tu Cuong Can Van Hao	CR	

Pham Viet Hung,CR10%Ha Minh LamCR10%Do Hoang SonCR10%Nguyen Hoang ThachCR10%Nguyen Tat ThangCR10%Nguyen Tat ThangCR10%Nguyen Minh Tri,PR10%Pham Van Trung,PR10%Nguyen Chu Gia Vuong,CR10%Le Dinh DinhCR10%Vo Hoang LinhAss.PR10%Vo Thi Nhu QuynhCR10%Triet Minh Le,CR10%Dinh Dung,Ass.PR10%Nguyen Hung Chinh,PR10%Nguyen Hung Chinh,PR10%Le Giang,PR10%Le Mau Hai,CR10%Luu Ba ThangAss.PR10%Luu Ba ThangAss.PR10%Luu Ba ThangCR10%Nguyen Van TraoCR10%Duong Anh TuanCR10%Nguyen Sum,Ass PR10%Nguyen Ngoc Doanh,Ass PR10%Nuguyen Ngoc Doanh,Ass PR10%Ng	
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Singapore	NUS	Permanent Zhu Chengbo, Dinh Tien Cuong, Wee Teck Gan Weizhu Bao,	PR 20% PR 20% PR 20% PR 20%	
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