



Consiglio di
Amministrazione

Seduta del

18 LUG. 2017

Nell'anno **duemiladiciassette**, addì **18 luglio** alle ore **15.54**, presso il **Salone di rappresentanza** sito al primo piano del Rettorato, si è riunito il Consiglio di Amministrazione, convocato con nota rettoriale prot. n. 0056828 del 13.07.2017 e integrato con nota rettoriale prot. n. 0057739 del 18.07.2017 (**Allegato 1**), per l'esame e la discussione degli argomenti iscritti al seguente ordine del giorno:

..... **O M I S S I S**

Sono presenti: il **rettore** prof. Eugenio Gaudio, Presidente; il **prorettore vicario** prof. Renato Masiani; i consiglieri: prof.ssa Antonella Polimeni, prof. Vincenzo Francesco Nocifora, prof. Bartolomeo Azzaro, dott. Francesco Colotta, prof. Michel Gras, sig. Beniamino Altezza, dott.ssa Angelina Chiaranza, sig. Angelo Marzano, sig. Antonio Lodise e il **direttore generale** Carlo Musto D'Amore, che assume le funzioni di segretario.

Assiste per il Collegio dei Revisori dei Conti: dott. Massimiliano Atelli (entra alle ore 17.08).

Il Presidente, constatata l'esistenza del numero legale, dichiara l'adunanza validamente costituita e apre la seduta.

..... **O M I S S I S**

D. 321/17
Conv. 14,3



SAPIENZA UNIVERSITÀ DI ROMA
Area di supporto alla Ricerca - ASuRTT
e Trasferimento Tecnologico - ASuRTT
Ufficio Fund Raising e Progetti
Settore Convenzioni e Progetti
Il Capo del Settore
Dott. Massimo Bartoletti

SAPIENZA UNIVERSITÀ DI ROMA
Area di supporto alla Ricerca
e Trasferimento Tecnologico - ASuRTT
Ufficio Fund Raising e Progetti
Il Capo dell'Ufficio
Dott. Ciro Franco

SAPIENZA UNIVERSITÀ DI ROMA
Area di supporto alla Ricerca
e Trasferimento Tecnologico - ASuRTT
Il Direttore
Dott.ssa Antonella Gammella

PROPOSTA DI AFFERENZA AL NODO CECAM-IT-SIMUL

Il Presidente sottopone all'attenzione del Consiglio di Amministrazione la seguente relazione predisposta dal Settore Convenzioni e Centri Interuniversitari dell'Ufficio Fund Raising e Progetti dell'Area Supporto alla Ricerca e Trasferimento Tecnologico.

Si fa presente che da parte del Prof. Casciola, ordinario presso il Dipartimento di Ingegneria Meccanica e Aerospaziale e già Direttore del precedente Nodo CECAM presso Sapienza, è pervenuta la richiesta di partecipazione al nuovo Nodo CECAM-IT-SIMUL.

Si ricorda che la nostra Università già nel 2013 è entrata a far parte del CECAM (Centre Européen de Calcul Atomique et Moléculaire) supportando la creazione del terzo nodo CECAM italiano, CECAM-IT-Sapienza.

Aderiscono al CECAM le seguenti istituzioni italiane: CNR (Consiglio Nazionale delle Ricerche), IIT (Italian Institute of Technology), SISSA (Scuola Internazionale Superiore di Studi Avanzati) e SNS (Scuola Normale Superiore).

A tale proposito, si specifica che, conformemente all'art. 5.3 della Convenzione CECAM, ogni Nodo è rappresentato nel Consiglio attraverso le organizzazioni aderenti.

Pertanto, non essendo attualmente Sapienza membro della Convenzione, i Dipartimenti dell'Ateneo, afferenti al costituendo Nodo, devono delegare una delle summenzionate organizzazioni per essere rappresentati nell'ambito del Consiglio. La scelta effettuata dal costituendo Nodo è ricaduta per opportunità in primis su un'istituzione italiana, optando per IIT, in quanto il CNR non garantisce la propria permanenza nell'ambito della Convenzione. Al riguardo, si segnala che tutte le altre università italiane afferenti al Nodo si sono già espresse favorevolmente in merito.

La struttura organizzativa del CECAM è descritta nell'art. 1.3 della citata Convenzione. Nello specifico, viene ivi sancito che il Consiglio di Amministrazione del CECAM è costituito dai Direttori di tutti i Nodi e dal Direttore del CECAM stesso. Pertanto, da parte delle Università proponenti l'adesione al Nodo, è stato individuato, quale Direttore del Nodo CECAM-IT-SIMUL, il Prof. Antonio Di Carlo, già ordinario presso Roma Tre ed ora in quiescenza, delimitandone l'incarico fino al momento della formale costituzione del Nodo stesso, a seguito del quale ci sarebbe stata una nuova nomina basata su elezione da parte dei componenti del Nodo.

Per quanto concerne l'impegno economico dell'Università, previsto all'art. 7 del Node Agreement, si rappresenta, altresì, che sono pervenuti i verbali dei Consigli dei Dipartimenti DIMA, DIET, SBAI e Matematica che hanno deliberato di aderire al nuovo Nodo in argomento assumendosi l'impegno a organizzare attività CECAM per 4.000,00 euro/anno (quadriennio 2017-2020) ed a trasferire 1.000,00 euro/anno al Nodo per l'organizzazione di eventi comuni (per un totale complessivo di euro 20.000,00).

18 LUG. 2017

Consiglio di
Amministrazione

Seduta del

L'Area competente ha provveduto a verificare lo stato di avanzamento dell'iter di approvazione della costituzione del Nuovo Nodo da parte degli altri Enti.

E' risultato che le altre istituzioni, in particolare il Politecnico di Torino, cui è assegnato il coordinamento del Nodo, hanno già deliberato le rispettive adesioni, non ravvedendo alcuna obiezione all'attuale formulazione e al generale disegno del costituendo Nodo.

Tutto quanto esposto, si sottopone in via definitiva a questo Consiglio la presente versione di testo di Convenzione.

Allegati parte integrante: Convenzione CECAM;
Supplementary SIMUL Node Agreement

Allegati in visione: deliberazione n. 181/14 del Consiglio di Amministrazione, seduta del 24.6.2017;

Verbali dei Consigli di Dipartimento di:

- Ingegneria dell'Informazione, Elettronica e Telecomunicazioni
- Ingegneria Meccanica e Aerospaziale
- Matematica
- Scienze di Base e Applicate per l'Ingegneria



..... O M I S S I S

DELIBERAZIONE N. 321/17

IL CONSIGLIO DI AMMINISTRAZIONE

- Letta la relazione istruttoria;
- Considerate le importanti finalità del progetto di costituzione del CECAM-IT-SIMUL Node;
- Esaminato il testo dell'Accordo per la costituzione del suddetto CECAM-IT-SIMUL Node;
- Presenti n. 11, votanti n. 9: con voto unanime espresso nelle forme di legge dal rettore e dai consiglieri: Polimeni, Nocifora, Azzaro, Gras, Altezza, Chiaranza, Marzano e Lodise

DELIBERA

- di approvare la proposta di costituzione del CECAM-IT-SIMUL Node e della relativa collaborazione di Sapienza al medesimo. A tal fine, ciascun Dipartimento interessato (Matematica, DIET, DIMA e SBAI) contribuirà mediante il trasferimento di una quota pari a € 1.000,00 a favore dell'amministrazione del Nodo CECAM, per un importo complessivo dell'Ateneo pari a € 5.000,00 annui. Inoltre, tutti i Dipartimenti succitati si impegnano a svolgere attività scientifiche a favore del CECAM, chiaramente identificate nei propri Bilanci, per un ammontare complessivo equivalente ad almeno € 15.000,00;
- di stabilire che l'afferenza al Nodo da parte di Sapienza non preveda, per tutta la durata della convenzione, quote di contribuzione superiori a quanto deliberato dai succitati Dipartimenti con riferimento al primo anno.

Letto e approvato seduta stante per la sola parte dispositiva.

IL SEGRETARIO
Carlo Musto D'Amore

IL PRESIDENTE
Eugenio Gaudio

..... O M I S S I S

CECAM CONVENTION

Between the Institutions detailed in Annex 1, hereafter called Member Organizations, is agreed what follows.

Preamble.

When creating CECAM 'Centre Européen de Calcul Atomique et Moléculaire' almost forty years ago Carl Moser foresaw the emerging role of high performance computing (HPC) in physics and chemistry. CECAM's early vision and pioneering coordination of the then small community of atomic and molecular practitioners paved the way for the development of modern computational tools in numerous fields that require a proper treatment of quantum and statistical features, such as nanophysics, biophysics and biochemistry, neurobiology, soft matter or material physics and chemistry.

Today, computer experiments allow scientists to access features in the structure or dynamical behaviour of complex systems in a way that real experiments often cannot do and computer calculations are the unavoidable tool for theory when dealing with these systems. Computer simulation in engineering provides valuable gains in productivity by accelerating the development and conception of new products.

The leading role of CECAM in the domain of computational physics, chemistry and biology has been well acknowledged by the world community. It is fair to say that many leading scientists worldwide have recognized the value of the well coordinated workshops and tutorials that CECAM has steadily organized over the last decades.

The CECAM Scientific Council proposed to upgrade CECAM from its original model, in order to respond to the urgent need for a new, strong European initiative in the domain of computational sciences (where Europe is particularly strong), an initiative that should develop alongside efforts to establish pan-European high performance computing services and should aim at sustaining and further advancing the leading role of the European simulation community at the cutting edge of development.

In harmony with these considerations, the Member Organizations have agreed to create a new European autonomous multi-nodal structure, called CECAM, aimed at promoting cooperation and fostering advanced research programs amongst the scientific communities dedicated to the *basic research* involving computationally intensive methods and its grand challenges simulation in Biology, Chemistry, Engineering and Physics.

Article 1. Summary.

The upgraded CECAM defined by this Convention has a new geographical structure, a wider set of objectives and therefore requires a new organizational structure.

Geographical Structure

1.1 CECAM is a European Research Organization having a multinodal structure distributed over a number of locations within Europe with a primary Centre hosting CECAM Headquarters, hereafter referred as "Headquarters", and secondary Centres, referred as "Nodes". Further details of the CECAM network are given in articles 4 and 5.

Objectives

1.2 CECAM aims to implement a research strategy in computational science that should boost the capability of the partner organizations to address emerging challenges in science and technology. The focus of CECAM's activities is to encourage European collaboration in order to foster groundbreaking research on particle-based numerical approaches designed to tackle problems in the physical and life sciences, applied mathematics and engineering, and to strengthen links with adjacent fields of computational science.

CECAM organizes and promotes a range of activities that include:

- supporting collaborative research projects through a programme of short and longer term visits of scientists to CECAM locations;
- organizing or sponsoring international meetings of varying scale and duration (seminars, discussion meetings, workshops, thematic and general conferences);
- organizing or sponsoring tutorials and schools aimed at the training of young scientists in specific areas of computational biology, chemistry, engineering and physics;
- contributing, through links with academics, to Master and Doctoral programs in Computational Science in high level European Universities;
- encouraging additional activities financed by other means and funding authorities when such activities benefit the CECAM community as a whole.

Organizational Structure

1.3 The activities outlined in paragraph 1.2 are organized throughout the CECAM network (Headquarters and Nodes) according to an organizational structure, described in article 6, which establishes four authorities to operate CECAM:

- The *CECAM Council* is the supreme governing body of CECAM, where all Member Organizations are represented. Its structure and functioning is the subject of paragraphs 6.1 to 6.10.
- The *CECAM Director* coordinates and executes the CECAM programme of activities (see articles 6.16 to 6.19.), under delegated authority from the CECAM Council. The Director and the CECAM administrative staff are located at the Headquarters (see article 4), where he/she also leads his/her research team.
- The *Board of Directors* consists of all Node Directors and the CECAM Director, who chairs the Board (see paragraphs 6.13 to 6.15). The CECAM Director and the Node Directors administer the part of the adopted programme taking place at their respective locations (see articles 6.16 to 6.19 and article 7). The Board of Directors works towards a coordinated optimal selection and distribution of CECAM activities throughout the network.
- The *Scientific Advisory Committee* (SAC) consists of eminent scientists, coming from the different fields covered by CECAM. Its role is to advise the CECAM Director and the Board of Directors on the CECAM scientific policy. The structure and tasks of the Scientific Advisory Committee are discussed in paragraphs 6.23 to 6.25.

1.4 The financial operations of CECAM are described in article 7. Article 8 defines the conditions for accepting new member organizations. Article 9 deals with publications. Article 10 concerns the duration of the Convention while article 11 deals with modalities in case of termination of CECAM.

1.5 The parties to the present Agreement encourage participation, by the scientific communities for which they are responsible, in all activities organized by the association throughout its network.

Article 2: Effective Date and Associated Documents.

2.1 This Convention becomes effective when signed by all Member Organizations. Any subsequent amendment to the Convention becomes effective when signed by all Member Organizations. Annex 1 lists the Member Organizations of CECAM and Annex 2 lists the Nodes of CECAM. Both lists are automatically updated when a new Member/Node is accepted, when a Member quits the Association or when a Node terminates or withdraws. Annex 3 states the currently agreed minimum membership fees (see article 7.1) and the minimum CECAM Node budget (see article 7.2). The content of Annex 3 may be modified by a vote at qualified majority (see article 3.3) of the Council, following which the President of the Council signs Annex 3 on behalf of the Member Organizations and the modified Annex 3 becomes effective.

2.2 This Convention is complemented by two additional documents:

- The “Headquarters Agreement”, which deals with the conditions of hosting CECAM by one of its Member Institutions.
- The “Node Agreement”, consisting of the whole set of bilateral agreements between CECAM and the Node institution or institutions establishing a specific Node. In this

way, the information given in the application, as approved by the Council, becomes an integral part of the agreements.

These documents and any modifications to them, which may from time to time be proposed, are agreed by a qualified majority vote of the CECAM Council, following which the President of the Council will sign the document in question on behalf of the Member Organizations.

Article 3: Decision Making Process In Council.

Voting

3.1 In all voting decisions of the Council each Member Organization casts one single vote. If the representatives of a Member Organization cannot attend a meeting, the Member Organization may nominate a proxy to cast its vote (see article 6.6).

Regular Meeting Procedure

3.2 A voting decision of the Council is valid only when at least two/thirds (2/3) of all Member Organizations are present (present in person or having cast a vote (see article 3.1)).

3.3 The following definitions apply to votes of the Council:

- a *simple majority* is defined as more than 50% of the votes present or otherwise taking part in the vote;
- a *qualified majority* is defined as more than 80% of the votes present or otherwise taking part in the vote;
- a *unanimous decision* is defined as a decision by all Member Organizations listed in Annex 1 taken with no opposition vote and no abstention.

3.4 Except where stated otherwise in this Convention, the decisions of the Council are taken with a simple majority. An abstention in the actual voting procedure is not counted as a vote.

Written Decision Procedure

3.5 In the event of urgent questions the Council may take decisions by written procedure on the initiative of the President. To this end the CECAM Director shall, on behalf of the President, email and/or fax all Members the proposed measures. Voting by written decision requires a vote or an abstention by all Member Organizations. Decisions are made following the same voting rules as laid down in articles 3.3 and 3.4. The email or fax shall include all relevant background information, and shall contain a return receipt with a deadline. Any Member or Substitute having received the message, who does not object or abstain in writing, is considered to agree with the proposal; the response period shall not be less than thirty calendar days. Members not confirming receipt shall be counted as abstaining.

If three or more Members request that the proposed measures be examined at the annual meeting, the written procedure shall be terminated without result and the President shall then call a meeting as soon as possible and take appropriate intermediate measures.

Article 4: CECAM Headquarters.

4.1 CECAM is headquartered in a site provided by one of the Member Organizations.

4.2 The conditions governing the hosting of the CECAM Headquarters by one of its Member Organizations are detailed in the “Headquarters Agreement”. This document can be updated by agreement between the CECAM Director and the host Institution. In order to be effective the changes require the approval of the CECAM Council by a qualified majority.

4.3 The programme of CECAM activities supports and involves the European computational research community as a whole, and is open to scientists worldwide. The majority of activities funded directly by Membership Contributions of CECAM’s Member Organizations (see article 7.1) will take place at the Headquarters. Activities at the Nodes will be, as a rule, funded by the CECAM Node budget (see article 7.2).

4.4 The decision to move the CECAM Headquarters requires a qualified majority vote of the Council, any such proposal being explicitly announced in the Agenda of a Council Meeting. The new Headquarters site is selected by the Council following a widely publicized call procedure.

Article 5: CECAM Nodes.

5.1 The purpose of a CECAM Node is to contribute to the practical achievement of the objectives described in section 1.2. In this respect, each Node is required to devote a budget (defined in article 7) to fund the CECAM activities with which it is associated.

5.2 A CECAM Node is a research structure inside a larger Institution (the “Node Institution”), or a consortium of such research structures, devoted to active research in computational sciences in one or more domains covered by CECAM. The Institution (or consortium of Institutions) proposing to host a Node is expected to be a prominent Research Centre in the country where it operates. In particular, this Institution is supposed to develop and sustain:

- An internationally recognised research programme at the frontiers of the scientific domain(s) of interest;
- All cyber-infrastructures suitable for/required by the activity of the CECAM Node.

In the simplest situation, a Node is linked to a single Institution which is also a member organization of CECAM. When the Node involves more than one “Node Institution” with possibly one or more Member Organizations of CECAM, a consortium agreement will be signed between all the institutions constituting the Node in order to establish the creation of the Node and to specify a person (possibly the Node Director) who can be authorised by each Node Institution to sign agreements related to the Node on behalf of each single institution constituting the Node.

5.3 Any Node is represented in the Council through all the Member Organizations to which the Node is associated.

5.4 A CECAM Node is created for a four year term by an agreement between the Node Institutions and CECAM. The set of such agreements for all Nodes constitutes the “Node Agreement” document defined in Article 2. The CECAM Council mandates its President to

sign these agreements on its behalf. The Node's authority, defined in the previous article, signs, if mandated accordingly, this agreement on behalf of each single Node Institution constituting the Node.

5.5 Before an agreement -as meant in the last paragraph- can be signed, the association of a specific Node with CECAM must be approved by a qualified majority vote of the Council. By a similar qualified majority vote, the Council may decide the closing of a Node at the end of a normal term period.

Under exceptional circumstances, for example when a Node does not comply with the Node Agreement, the President of the CECAM Council can propose with a detailed motivation a vote of the Council to remove a Node from the CECAM structure before the end of a normal term. This proposal must be agreed by the Council with a qualified majority vote and then it becomes effective.

5.6 A Node is renewed by the following procedure. At least three months before the Council meeting immediately preceding the termination date of the Node agreement, the Node authority, if mandated accordingly on behalf of each single institution constituting the Node, writes to the President of the Council stating its wish either to continue to host a Node or to cease Node activities. In the former case, the Node authority, if mandated accordingly on behalf of each single institution constituting the Node, may propose amendments to its Node agreement for the consideration of the Council. The Council then discusses this statement at its next meeting and decides by a qualified majority vote on renewal or termination.

5.7 The Node Institution (or Consortium) selects a scientist to act as CECAM Node Director for a mandate of 4 years maximum. This selection is normally made by an open procedure in which the CECAM President or CECAM Director or a representative designated by the President participates, at least as an observer. If the Node Institution or Consortium already employs a suitable candidate, it consults the CECAM President or the CECAM Director about the appointment. The appointments of Node Directors are acknowledged by the CECAM Council by the procedure laid down in paragraph 6.10.

5.8 As part of the CECAM network, the Nodes participate, through the Board of Directors, in setting up the programme of CECAM activities and in managing the part of the general programme of CECAM involving the Node, with emphasis on collaboration between nodes.

5.9 The list of Nodes is found in annex2. It is updated by decisions taken according to articles 5.3 to 5.5.

Article 6: Organizational Structure.

The CECAM Council

Powers

6.1 The supreme governing body of CECAM, representing all its Member Organizations, is the CECAM Council. The Council has the ultimate responsibility for all strategy and operations. It delegates the executive power to the CECAM Director it appoints.

Membership

6.2 Each Member Organization is represented on the Council by a delegation that has at most two members and one vote. This delegation should be fully mandated by the Member Organization to discuss and decide on its behalf issues of strategic importance for CECAM, and therefore have the high-level scientific expertise needed for the decision making process. It is for the Member Organization to decide whether both functions are to be performed by one delegate or separate scientific and administrative representatives are needed. No delegate should have a direct involvement with the operations of any Node sponsored by the Member Organization he/she represents.

President

6.3 The Council selects from its members a senior scientist to be its President and to chair all meetings of the Council. The President's term of office will normally be two years but can be extended to three years maximum. The President may nominate another member of the Council to act as Vice-President, to assist and occasionally deputise for the President.

Conflict of Interest

6.4 Council members shall be required, on taking up their appointment, to declare any private, professional or commercial interests, which might conceivably give rise to a conflict during their term on the Council. Members and observers shall be required at meetings to declare conflicts of interest in any item being discussed. In such cases the concerned member shall abstain and remain absent from any discussion or decision on the issue.

Evaluation

6.5 The Council retains the responsibility for arranging independent reviews of the quality of the CECAM Programme. To this end, periodically (approximately every four years), the Council sets up a Visiting Committee of eminent independent scientists to review the activities of CECAM (Headquarters and Nodes). This Visiting Committee is asked to deliver a thorough assessment of the scientific outputs of CECAM, of its added value to European computational research, of the balance between Nodes and of the efficiency of the organization. It also comments on the overall scientific strategy of CECAM and gives appropriate recommendations whenever necessary.

Annual Meeting

6.6 The Council meets regularly once a year. The President is obliged to convene an extraordinary Council meeting if a significant minority (25%) of its members requests this in writing. Members unable to attend a meeting must either be represented by a deputy chosen by the Member Organization or nominate another member of the Council to act as proxy on the condition that this other member has not already undertaken authorisation from another member. The Organization must notify in writing the CECAM President of the proposed deputy or proxy before the Council meeting.

6.7 Urgent questions, requiring Council decisions before the next scheduled meeting, may be handled by the written decision procedure described in article 3.5.

Agenda Points

6.8 Any Council decision requiring a vote must be explicitly announced in a separate point of the agenda of the Council Meeting.

Observers at Meeting

6.9 The Council may co-opt or consult other specialists selected for their expertise to assist with its work. Such specialists cast no votes at meetings of the Council.

Tasks

6.10 The principal tasks of the Council are:

- (i) to appoint by a qualified majority vote the CECAM Director;
- (ii) to acknowledge the appointment of a CECAM Node Director on the basis of a report by the CECAM representative in the local Node selection Committee or on the basis of a report presented by the Member Organization(s) to which the Node is associated;
- (iii) to approve individually the scientists proposed by the CECAM Director to form the CECAM Scientific Advisory Committee;
- (iv) to establish the long term strategy of CECAM. In this task the Council will work closely with the CECAM Director who will, with the Board of Directors, initiate the process of strategy development (see paragraph 6.18 (i)). The strategy will cover:
 - a) the main scientific challenges CECAM should address, within the resources available to it;
 - b) the ways in which CECAM nodes will collaborate on these challenges;
 - c) the balance of activities comprising the CECAM programme as a whole;
- (v) to review periodically the activities of CECAM as explained in article 6.5;
- (vi) to discuss and decide on the Annual Report of Accounts for the previous year (this includes Headquarters and Node budgets) and the corresponding Annual Report of the Scientific Activities of CECAM, after receiving these reports from the CECAM Director before the annual meeting of the Council for approval (see articles 6.18 (vii) and 6.18 (viii));
- (vii) to discuss and decide on the planned CECAM scientific Programme for the coming year (this includes Headquarters and Node budgets) together with its Provisional Budget as established by the Board of Directors, after receiving these documents from the CECAM Director before the annual meeting of the Council for approval (see article 6.14 (i));
- (viii) to discuss and decide on any other matter the Council deems necessary within the framework of CECAM's aims and activities.

Information

6.11 In order to carry out the tasks mentioned above, the Council may request from the Director any information it considers useful.

Suspension

6.12 In the exceptional case of a conflict between a Node and the Board of Directors, the Council will take up the issue. The "CECAM" status of the Node may be temporarily suspended to allow the Host organization, the Board of Directors and the CECAM Council to resolve any issues that may have arisen.

The Board of Directors

6.13 The Board of Directors meets whenever needed but at least once a year, sufficiently in advance of the meeting of the Council meeting at which the Annual Reports over the previous year and the CECAM Scientific Programme for the coming year with its Provisional Budget are to be discussed.

6.14 The principle tasks of the Board of Directors are to:

- (i) prepare annually the CECAM Scientific Programme and establish the Provisional overall Budget (this includes Headquarters and Node budgets) to be submitted by the CECAM Director to the Council for approval, taking into account the Node Agreements signed between the Node Institutions and CECAM, particularly the activities laid down therein;
- (ii) ensure the coherent and appropriate distribution of all CECAM activities taking place at the CECAM Headquarters, or CECAM nodes;
- (iii) act as a consultant body to the CECAM Director for the selection of the SAC;
- (iv) approve any request for external funding;
- (v) contribute to and implement the long-term strategy agreed by the Council,
- (vi) approve all general calls for proposals before being executed by the CECAM Director and incorporate all honoured applications into the CECAM scientific Programme.

Decision Making Process

6.15 The Board of Directors operates by consensus but if necessary may take decisions by vote. Any such votes follow the Council voting procedures laid down in article 3, in which each Node will cast a single vote. The President of the CECAM Council attends one meeting per year of the Board of Directors to ensure good communications between the Council and the Board.

The CECAM Director

6.16 The scientific programme endorsed by the Council is implemented by a distinguished scientist acting as Director. He or she is appointed by a qualified majority vote of the Council, having been selected from a list of suitable candidates assembled by a search committee established by the Council. The CECAM Director's mandate lasts four years (extendable to six years maximum in exceptional cases) to allow a rotation of scientific fields and nationalities.

6.17 The CECAM Director is responsible to the Council for the financial management of CECAM business, to be exercised in accordance with the measures laid down in the Headquarters Agreement. However, the CECAM Director is not permitted, without the consent of the Council, to exceed the CECAM budget, or to transfer amounts between expenditure lines for more than 20%.

6.18 The CECAM Director is responsible for the planning and implementation of CECAM's programme, and specifically:

- (i) ensures the efficient organization and operation of all CECAM activities;
- (ii) drafts the initial long term strategy document for consideration by the Council in consultation with the Scientific Advisory Committee and the Board of Directors;
- (iii) implements the policy decided by the Council, and carries out Council's decisions;
- (iv) prepares the Annual Report of Accounts for the previous year and the Provisional Budget for the coming year (see article 6.14 (i)) and submits them to the Council for approval at least one month before the relevant Council meeting;
- (v) prepares the Annual Report of the Scientific Activities of CECAM for the previous year, including node activities, to the Council for approval at least one month before the relevant Council meeting;
- (vi) submits applications in the name of CECAM for external funding according to the following procedure. If time allows, the CECAM Director includes foreseen applications in the annual plan presented to the Council, identifying any associated risks or commitments. If time does not allow this to be done, the CECAM Director consults the President of the Council regarding applications with a total value exceeding 500,000 Euros. The CECAM Director includes a list of all external funding in the Annual Report of Accounts to the Council, together with an estimate of the risks or commitments associated with the external funding;
- (vii) launches calls for proposals and participation in CECAM activities according to the strategy approved by the Council;
- (viii) chairs the Board of Directors and represents the Board at Council Meetings;

- (ix) proposes the membership of and chairs the Scientific Advisory Committee;
- (x) presents the assessments of the SAC to the Council in the Annual Report of Scientific Activities;
- (xi) attends Council meetings in a non-voting capacity;
- (xii) develops, on his/her own initiative, a sustained research programme of international quality;
- (xiii) is responsible for capital items bought with CECAM's funds.

6.19 The status of the CECAM Director within the institution hosting the CECAM Headquarters is defined in the "Headquarters Agreement".

The Node Directors

6.20 A distinguished scientist acts as Node Director, according to the provisions of article 5.7. His/her period of office and other administrative aspects (including authority for Node financial matters) are stated explicitly in the Node Agreement between the Node Institution (or institutions in the case of a consortium node) and CECAM. The Node Director is ex-officio a member of the CECAM Board of Directors.

6.21 The Node Director is accountable to the Board of Directors for the planning and implementation of CECAM's approved programme at the Node, and specifically:

- (i) ensures the efficient organization and operation of all CECAM activities at the Node;
- (ii) participates in the development of the long term strategy of CECAM – Node Directors may bring to the Board of Directors any idea or initiative of interest to the Node and to CECAM as a whole, seeking opportunities for collaboration between the Nodes;
- (iii) prepares the financial accounts, the annual budget and a report of CECAM activities at the Node and submits them to the Board of Directors. When approved by this Board, they are included in the CECAM Director's Annual Reports to the Council in accordance with articles 6.18 (vii), 6.18 (viii) and 6.18 (ix);
- (iv) contributes to the development of the collaborative research programme of CECAM, pursuing all appropriate opportunities to apply, jointly with CECAM Headquarters and/or other Nodes, for external research funding (see 6.18 (ix)).

Membership Restrictions

6.22 A Node Director may not simultaneously also be a member of the Council or a member of the Scientific Advisory Committee. However, from time to time the Council may invite a Node Director to a Council meeting in which it discusses an item of special relevance to the Node in question.

The Scientific Advisory Committee

Membership and Chair

6.23 The CECAM Director chairs a Scientific Advisory Committee of five to ten members. Members of this Committee are eminent researchers representing the scientific disciplines in which CECAM is or intends to become active. They are proposed by the CECAM Director after consultation within the Board of Directors and appointed individually by the Council. The term of office of the Scientific Advisory Committee coincides with that of the Director.

Tasks

6.24 The principal tasks of the SAC are to:

- (i) make recommendations for the long term scientific vision and strategy of CECAM;
- (ii) assist the CECAM Director to conduct a proper peer review by assessing and prioritizing the scientific quality of all proposals for workshops, tutorials and other initiatives submitted within a given call for proposals;
- (iii) gives advice to the Board of Directors on the planning of the CECAM programme.

Membership Restrictions

6.25 A member of the Scientific Advisory Committee may not simultaneously also be a member of the Council or a Node director.

Article 7: Finances.

7.1 Membership Contributions

The parties to the present Convention undertake to make available to the association an annual grant to cover the costs of the association and to contribute to the scientific programme endorsed by the Council. The grant to be contributed is at the discretion of the Member Organization, but must be at least equal to the minimum contribution specified in Annex 3 (see article 2.1).

These Member contributions are collected by and administered in the CECAM Headquarters. The detailed methods of payment of Member contributions are specified in the Headquarters Agreement.

The actual contributions to be made in a given financial year by each individual Member Organization are communicated to the CECAM Director on his/her request in order to allow the timely drawing up of the annual Provisional Budget according to article 6.18 (vii). These statements on the contribution are confirmed by each Member Organization at the next annual meeting of the Council.

7.2 CECAM Node Budget

Each Node provides a budget (the Node budget) for CECAM activities. This budget is managed autonomously by the Node Director within the Node Institution's administration. The amount of this CECAM Node budget is at the discretion of the Node Institution, but must be at least equal to the minimum amount quoted in Annex 3 and be sufficient to cover the Node activities programme as given in the Node Agreement (see article 2.1).

The provisional Node budgets for a given financial year are confirmed annually in a meeting of the Board of Directors and then reported to the Council in the CECAM Director's Provisional Budget for the financial year in question (see article 6.18 (vii)).

The choice of activities to be financed by the set of Node budgets is decided jointly within the Board of Directors. In its decisions, the Board of Directors respects the agreements signed between the Node Institutions and CECAM which are collected in the Node Agreements (see article 2.2).

Article 8: Extension of Membership to New Members.

Any appropriate European research organization may become a Member Organization of CECAM after a formal written proposal to the CECAM Council, followed by a qualified majority vote of the Council and finally the signing of the Convention by the new Member Organization. Such an extension of membership appears as an update of Annex 1 to the present convention. The amount of the new Member Organization's contribution is fixed according to the provisions laid down in Article 7 above.

Article 9: Scientific Publications.

Scientific publications arising from research work sponsored by CECAM must acknowledge the location and source of support, mentioning CECAM.

Article 10: Duration.

10.1 This Convention remains in force for a period of four years from the date of the last signature by the Member Organizations. At the end of this period it will be renewed for another four years unless opposed by a simple majority of the Council. In the latter case, the Council establishes a Task Force, chaired by the President, charged with proposing an amended Convention. If this Task Force produces an amended Convention that the Council adopts unanimously, then the amended Convention will remain in force for the following four years. If after six months the Task Force fails to produce an amended Convention, or if the Council fails to adopt the amended Convention proposed by the Task Force within the following two months, then the procedure to terminate the CECAM association (article 11) is initiated.

10.2 Any Member Organization wishing to withdraw from the association can do so by giving written notification to the President of Council. Any such withdrawal shall become operative

six months after receipt of the notification. No claim of share of assets is possible at that occasion. If the withdrawing Member Organization is the sole representative of a Node in the Council, the CECAM activities of that Node will cease at the date the Member Organization withdraw becomes operative, with the possible exception of any pending CECAM activities which had been decided in an earlier Council Meeting.

Article 11: Termination.

If the Council decides, by the procedure laid down in Article 10.1, to terminate and dissolve the CECAM organization as a whole, the President, helped by the Director of CECAM, proposes the means by which any associated staff are to be treated, any assets are to be disposed of or distributed, any grants held in the name of CECAM are to be terminated and all remaining liabilities and other matters are to be handled so that an orderly winding up of CECAM's affairs is achieved. These proposals are discussed by the Council, amended if necessary and agreed by a simple majority vote, and then carried out by the Director of CECAM and the Directors of the Nodes.

Article 12: Legal Nature of this Convention

The present Convention, signed by understate entities, and whose aim is the scientific cooperation, has the legal nature of an international administrative agreement, to which the Vienna Convention on the Law of Treaties on 23rd of May 1969 does not apply.

Lausanne, December 1st, 2009

ANNEX 1

CECAM MEMBER ORGANIZATIONS

- Centre National de la Recherche Scientifique (CNRS), France;
- Commissariat à l'Energie Atomique (CEA), France;
- Consiglio Nazionale delle Ricerche (CNR), Italy;
- Deutsche Forschungsgemeinschaft (DFG), Germany;
- Ecole Normale Supérieure de Lyon (ENS-L), France;
- Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland;
- Engineering and Physical Sciences Research Council (EPSRC), United Kingdom;
- Fonds de la Recherche Scientifique (F.R.S.-FNRS), Belgium;
- Fonds National Suisse de la Recherche Scientifique-Schweizerischer Nationalfonds zur Förderung der wissenschaftlichen Forschung (FNS-SNF), Switzerland;
- Fonds Wetenschappelijk Onderzoek-Vlaanderen (FWO), Belgium;
- Forschungszentrum Jülich (FZJ), Germany;
- Irish Universities Association (IUA), Ireland;
- Max-Planck-Gesellschaft (MPG), Germany;
- Ministerio de Ciencia e Innovación (MICINN), Spain;
- Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO), The Netherlands;
- Science and Technology Facilities Council (STFC), United Kingdom;
- Scuola Internazionale Superiore di Studi Avanzati (SISSA), Italy;
- Universiteit van Amsterdam (UvA), The Netherlands.

ANNEX 2

CECAM NODES

ANNEX 3

Minimum Membership Fees

The grant to be contributed for CECAM Membership is at the discretion of the Member Organization but is at least equal to the minimum contribution of 30,000 Euros per year.

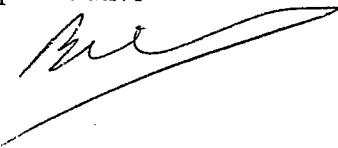
Minimum Node Budget

The amount of the CECAM Node budget is at the discretion of the Node Institution but is at least equal to 50,000 Euros per year.

For Centre National de la Recherche Scientifique (CNRS), France

.....BERTRAND.....GIRARD.....
Name of legally authorized representative (written in full)

HEAD DIRECTOR, INSTITUTE OF PHYSICS
Function of legally authorized representative



.....
Signature of legally authorized representative

...DECEMBER... 07, 2009... PARIS....
Date and Location

INP

.....
Stamp of the Organization

For Commissariat à l'Energie Atomique (CEA), France

Bernard BIGOT

.....
Name of legally authorized representative (written out in full)

.....
Chairman
Function of legally authorized representative

.....
Signature of legally authorized representative

.....
Date and Location 4/14/09

.....
COMMISSARIAT A L'ÉNERGIE ATOMIQUE
L'Administrateur Général
Bâtiment Siège
91191 GIF-SUR-YVETTE CEDEX

.....
Stamp of the Organization

For Consiglio Nazionale delle Ricerche (CNR), Italy

Luciano Maiani

Name of legally authorized representative (written out in full)

IL PRESIDENTE

Function of legally authorized representative

Luciano Maiani

Signature of legally authorized representative

Luciano Maiani F 8 GEN 2010

Date and Location

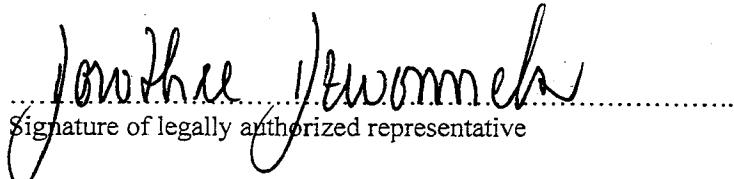


Stamp of the Organization

For Deutsche Forschungsgemeinschaft (DFG), Germany

Dorothee Dzwonnek.....
Name of legally authorized representative (written out in full)

Secretary-General.....
Function of legally authorized representative


Signature of legally authorized representative

Bonn, 06 January 2010.....
Date and Location

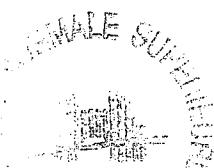
Deutsche Forschungsgemeinschaft
Kennedyallee 40
53170 Bonn

.....
Stamp of the Organization

For Ecole Normale Supérieure de Lyon (ENS-L), France

Jacques SAMARUT

Name of legally authorized representative (written out in full)



Directeur

Function of legally authorized representative

Signature of legally authorized representative

Jacques SAMARUT
Directeur de l'Ecole
Normale Supérieure
de Lyon

18 décembre 2009

Date and Location



Stamp of the Organization

For Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland

Professor Giorgio Margaritondo

.....
Name of legally authorized representative (written out in full)

Vice-president for academic affairs

.....
Function of legally authorized representative



.....
Signature of legally authorized representative

December, 7 2009 in Lausanne

.....
Date and Location

Ecole Polytechnique Fédérale de Lausanne
Giorgio Margaritondo
Vice-président pour les affaires académiques
Bâtiment CE, Station 1
CH-1015 Lausanne, Switzerland

.....
Stamp of the Organization

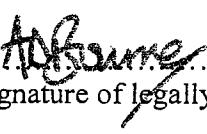
For Engineering and Physical Sciences Research Council (EPSRC), United Kingdom

Dr Andrew Bourne

.....
Name of legally authorized representative (written out in full)

Head, Physical Sciences

.....
Function of legally authorized representative


.....
Signature of legally authorized representative

.....
5/1/2010
.....

Date and Location

.....
Stamp of the Organization

For Fonds de la Recherche Scientifique (F.R.S.-FNRS), Belgium

.....VERONIQUE HALLOIN.....
Name of legally authorized representative (written out in full)

.....Secretary general.....
Function of legally authorized representative

.....
Signature of legally authorized representative

.....9th December 2009, Brussels.....
Date and Location

**Fonds de la Recherche
Scientifique - FNRS
Rue d'Egmont, 5.....**
Stamp of the ~~Bruxelles~~ Bruxelles

For Fonds National Suisse de la Recherche Scientifique - Schweizerischer Nationalfonds zur Förderung der wissenschaftlichen Forschung (FNS-SNF), Switzerland

.....Daniel Höchl.....

Name of legally authorized representative (written out in full)

.....Director.....

Function of legally authorized representative

.....Daniel Höchl.....

Signature of legally authorized representative

.....Bern, 6/11/2009.....

Date and Location

Fonds national suisse
Wildhainweg 3
3001 Berne

.....
Stamp of the Organization:

For Fonds Wetenschappelijk Onderzoek-Vlaanderen (FWO), Belgium

.....Elisabeth Monard.....
Name of legally authorized representative (written out in full)

Secretary General.....
Function of legally authorized representative



.....
Signature of legally authorized representative

9 December 2009, Brussels.....
Date and Location



.....
Stamp of the Organization

For Forschungszentrum Jülich (FZJ), Germany

.....
Name of legally authorized representative (written out in full)

.....
Function of legally authorized representative

.....
Signature of legally authorized representative

.....
Date and Location

FORSCHUNGSZENTRUM JÜLICH GMBH
Geschäftsbericht Technologie-Transfer
D - 52425 Jülich

.....
Stamp of the Organization

For Irish Universities Association (IUA), Ireland

Ned Costello

Name of legally authorized representative (written out in full)

CHIEF EXECUTIVE

Function of legally authorized representative

Ned Costello

Signature of legally authorized representative

5th JAN 2010 - DUBLIN

Date and Location

Stamp of the Organization:

For Max-Planck-Gesellschaft (MPG), Germany

P. Gruss

.....
Prof. Dr. Peter Gruss,

B. Bludau

.....
Dr. Barbara Bludau

.....
H. M. 2009

Name of legally authorized representative (written out in full)

.....
President of the Max Planck Society

.....
Secretary General of the Max Planck Society

.....
Function of legally authorized representative

.....
Signature of legally authorized representative

München,

.....
Date and Location

MAX-PLANCK-GESELLSCHAFT
ZUR FÖRDERUNG DER WISSENSCHAFTEN
GEMEINSAMVERWALTUNG
POSTFACH 10 02 · 80034 MÜNCHEN
HOTEL- & CONVENTION 80539 MÜNCHEN

.....
Stamp of the Organization

For Ministerio de Ciencia e Innovación (MICINN), Spain

Montserrat Torné i Escasany

.....
Name of legally authorized representative (written out in full)

.....
Directora General de Cooperación Internacional
y Relaciones Institucionales

.....
Function of legally authorized representative





.....
Signature of legally authorized representative

.....
Madrid, 20 JUN. 2010

.....
Date and Location



.....
Stamp of the Organization

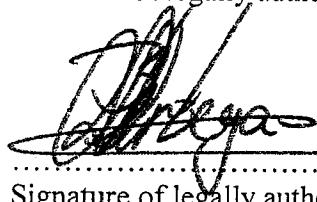
For Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO),
The Netherlands

.....Dr. denis B. J. Versteegh.....

Name of legally authorized representative (written out in full)

.....Director, Physical & Chemical Sciences and ACTS.....

Function of legally authorized representative



.....

Signature of legally authorized representative

.....The Hague, 10 December 2009.....

Date and Location

.....

Stamp of the Organization

For Science and Technology Facilities Council (STFC), United Kingdom

GARY ROBBINS

Name of legally authorized representative (written out in full)

Head of Commercial Management

Function of legally authorized representative

G. N.

Signature of legally authorized representative

18/01/10

Date and Location



Science & Technology
Facilities Council

Stamp of the Organization

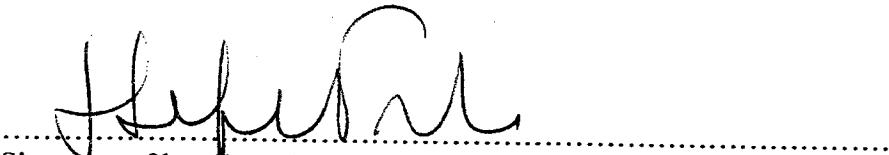
For Scuola Internazionale Superiore di Studi Avanzati (SISSA), Italy

PROF. STEFANO FRANZOI

Name of legally authorized representative (written out in full)

DIRECTOR, SISSA

Function of legally authorized representative



Signature of legally authorized representative

17/12/2009, TRIESTE

Date and Location



Stamp of the Organization

For Universiteit van Amsterdam (UvA), The Netherlands

Lambertus Dominicus Noordam

Name of legally authorized representative (written out in full)

Dean Faculty of Science

Function of legally authorized representative

LD Noordam

Signature of legally authorized representative

Amsterdam, December 17, 2009

Date and Location



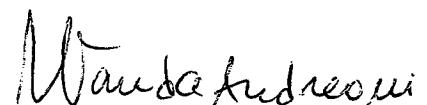
Stamp of the Organization

Lausanne, le 10 décembre 2012

Je soussignée, Wanda Andreoni, déclare que les documents ci-joints :

- Signature du Center for Computational Materials Science (CMS), Vienna, Austria (pages 1 à 2)
- Signature de Aalto University, Aalto, Finland (pages 1 à 2)
- Signature de Tel Aviv University (TAU), Tel Aviv, Israel (pages 1 à 2)

sont les copies conformes des documents originaux datés respectivement du 28 mars 2011, 4 avril 2012 et .



Prof. Wanda Andreoni

Directrice

Centre Européen de Calcul
Atomique et Moléculaire

Ecole Polytechnique
Fédérale de Lausanne

CECAM - EPFL
BCH (Batochime)
1015 Lausanne
Switzerland

APOSTILLE

(Convention de La Haye du 5 octobre 1961)

1. Pays: SUISSE

Le présent acte public

2. a été signé par *Wanda Andreoni*

3. agissant en qualité de *directrice*

4. est revêtu du sceau/timbre de *CECAM - EPFL - Centre*

Européen de Calcul Atomique et Moléculaire - Ecole
Polytechnique Fédérale de Lausanne Attesté

5. à Lausanne 6. le *10 décembre 2012*

7. par la Chancellerie d'Etat du Canton de Vaud

8. sous N° *16293*

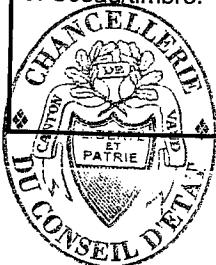
9. Sceau/timbre:

10. Signature

pr le Chancelier d'Etat:



Christophe CHEVALLEY



For Center for Computational Materials Science (CMS), Vienna,
Austria

PETER MOHN

Name of legally authorized representative (written out in full)

CHAIRMAN

Function of legally authorized representative

Peter Mohn

Signature of legally authorized representative

Vienna, 28. March. 2011

Date and Location

Center for Computational Materials Science
Vienna University of Technology
Wiedner Hauptstr. 8-10/134
A-1040 Vienna, AUSTRIA

Stamp of the Organization

For Aalto University (Aalto), Aalto, Finland

Iikka Niemelä

Name of legally authorized representative (written out in full)

Deputy President of Aalto University

Function of legally authorized representative

Iikka Niemelä

Signature of legally authorized representative

4th of April Espoo Otaniemi

Date and Location



Stamp of the Organization

For Tel Aviv University (TAU), Israel

PROF. ERAN RABANI

Name of legally authorized representative (written out in full)

Vice President for Research and Development

Function of legally authorized representative

Eran Rabani

Signature of legally authorized representative

April 17, 2012 Tel Aviv

Date and Location



For Sapienza University of Rome (SAPIENZA), Italy

Luigi Frati

Name of legally authorized representative (written out in full)

Rector of Sapienza

Function of legally authorized representative

Luigi Frati

Signature of legally authorized representative

19 DIC. 2012 Rome

Date and Location



Stamp of the Organization

CECAM-IT-SIMUL Node

Supplementary SIMUL Node Agreement

1 Purpose

This Agreement between

Centre Européen de Calcul Atomique et Moléculaire, Tax Code CHE-116.075.613, with Headquarters at Ecole Polytechnique Fédérale de Lausanne, represented by the Council President, Prof. Christoph Dellago, born in Bozen on April 11, 1965, domiciled for the purposes of this Agreement at the Headquarters of the Institution in Ecublens (Switzerland), 2 avenue Forel, Batochime (BCH), and authorised to draw up this act by the CECAM Council held on November 23–24, 2016 (hereinafter known as “CECAM”),

and a **Consortium** comprising the following Institutions:

- **Università degli Studi di Roma “La Sapienza”**, Tax Code no. 80209930587, represented by the Rector, Prof. Eugenio Gaudio, born in Cosenza on September 15, 1956, domiciled for the purposes of this Agreement at the Headquarters of the Institution in Roma, Piazzale Aldo Moro, 5 and authorised to draw up this act by the Board of Directors held on _____, 2017 (hereinafter known as “Università La Sapienza”),
- **Università degli Studi di Roma “Tor Vergata”**, Tax Code no. 80213750583, represented by the Rector, Prof. Giuseppe Novelli, born in Rossano (CZ) on February 27, 1959, domiciled for the purposes of this Agreement at the Headquarters of the Institution in Roma, Via Orazio Raimondo, 18 and authorised to draw up this act by the Board of Directors held on January 31, 2017 (hereinafter known as “Università Tor Vergata”),
- **Università degli Studi dell’Aquila**, Tax Code no. 01021630668, represented by the Rector, Prof. Paola Inverardi, born in L’Aquila on November 11, 1957, domiciled for the purposes of this Agreement at the Headquarters of the Institution in L’Aquila, Via Giovanni Di Vincenzo, 16/B and authorised to draw up this act by the Board of Directors held on December 13, 2016 (hereinafter known as “Università dell’Aquila”),
- **Politecnico di Torino**, Tax Code no. 00518460019, represented by the Rector, Prof. Marco Gilli, born in Turin on November 7, 1965, domiciled for the purposes of this Agreement at the Headquarters of the Institution in Torino, Corso Duca degli Abruzzi, 24 and authorised to draw up this act by the Board of Directors held on February 1, 2017 (hereinafter known as “Politecnico Torino”),
- **Politecnico di Milano**, Tax Code no. 80057930150, represented by the Rector, Prof. Ferruccio Resta, born in Bergamo on August 29, 1968, domiciled for the purposes of this Agreement at the Headquarters of the Institution in Milano, Piazza Leonardo da Vinci, 32 and

authorised to draw up this act by the Board of Directors held on November 29, 2016 (hereinafter known as “Politecnico Milano”),

establishes a CECAM Node called “IT-SIMUL” within the Consortium.

The Agreement forms a supplement to the Convention of CECAM signed at Lausanne on December 1, 2009 and is subject to the provisions in that Convention. In particular, Articles 1, 4 and 5 of the Convention describe the multi-nodal structure of CECAM and define the roles of the Headquarters and Nodes within that structure. The Consortium is represented on the Council of CECAM by the Italian Institute of Technology (IIT).

2 Duration

This Agreement will apply for the 4 years between January 1, 2017 and December 31, 2020.

During the final year of the Agreement, the CECAM Council and the Consortium will review it, consider any proposed modifications to its present form and agree either to extend it for a further 4 years or to terminate it.

3 Objectives of CECAM

The general purpose of CECAM is to organise and promote the range of activities listed in Article 1 of the Convention in order to enhance European cooperation in computational research in biology, chemistry, engineering and physics.

4 Objectives of the SIMUL Node and its supporting Institutions

The SIMUL Node aims at promoting computational science in Italy by developing leading-edge fundamental research on advanced computational methods, contributing to education and training in collaboration with other CECAM Nodes and with domestic and foreign Universities, fostering collaboration among different communities—physics, chemistry, engineering, applied mathematics—with a special focus on industrial applications.

The principal in-house computational research interests and capabilities within the Consortium are as follows: continuum, molecular, quantum and multi-scale modelling of condensed matter (solids, liquids, solutions, soft matter, biological systems); equilibrium and non-equilibrium statistical mechanics, many-body theory; quantum chemistry, electronic structure theory, chemical thermodynamics and reaction kinetics; low-dimensional fermionic systems, bosonic lattice systems and bosonic mixtures; plasma physics; fluid dynamics, turbulence and chaotic systems, solid mechanics, electromagnetics, multi-physics; applied mathematics and numerical analysis (ODEs, PDEs, multi-scale time series analysis).

The interests and capabilities within the Consortium with regard to the support of computational research within a wider scientific community are as follows: development of simulation techniques for opto-electronics of novel materials and nanodevices, nanostructured quantum devices and organic-inorganic atomistic systems (semiconductors, nanostructured

metal-oxides, graphene-based devices and their interaction with amino acids and peptides); statistical multi-scale analysis of time-series databases (atmospheric measurements, cardiac monitoring, processing of medical images), statistical analysis of big data; modelling in economics and finance; international collaboration, in particular within EU-financed projects; cooperation with industry; advanced education and training in computational modelling, HPC, parallel programming.

The infrastructures available within the Consortium for CECAM activities are as follows: computer servers and small/medium clusters, access to CINECA HPC through INFN, PRACE, and ISCRA projects; meeting rooms and lecture halls of different sizes with multi-media capabilities, classrooms equipped with computers and internet connection for practicals; rooms to host guests and visiting professors; several attractive locations for meetings and summer schools.

These interests, capabilities and infrastructures are the basis for the establishment of a CECAM Node within the Consortium.

5 The Director of the SIMUL Node

The Director of the SIMUL Node will be Antonio DiCarlo. By this Agreement the Council of CECAM endorses this appointment, having followed the procedure for doing so laid down in paragraph 6.10(ii) of the Convention.

The duration of the appointment of the Director of the SIMUL Node shall be a maximum of four years. In the event that the Director of the SIMUL Node has to be replaced, the Node Council will elect a successor. The appointment will be subject to the endorsement of the Council of CECAM.

The Director of CECAM together with all the Node Directors will constitute the CECAM Board of Directors. This Board will be chaired by the Director of CECAM and carry out the tasks assigned to it in Article 6.14 of the Convention. The Consortium agrees that Antonio DiCarlo will represent the SIMUL Node on the Board of Directors.

6 CECAM Activities at the SIMUL Node

The entire programme of CECAM activities in any given year, that is

- (i) activities to be hosted at the CECAM Headquarters in EPF Lausanne, plus
- (ii) activities to be hosted at the SIMUL Node, plus
- (iii) activities to be hosted at the other Nodes

will be agreed during the previous year following discussions in the Board of Directors, as described in articles 6.13 and 6.14 of the Convention, subject to approval of the CECAM Scientific Council.

Subject to such discussions in the Board of Directors, the SIMUL Node intends to participate in the following CECAM activities: developing leading-edge fundamental research on

advanced computational methods at a national level; promoting collaborative enterprises, with a particular attention to engineering applications; organising workshops and schools.

7 Financial Arrangements

The Institutions in the Consortium confirm that they are prepared to provide overall funding of at least € 50,000.00 per annum to support such CECAM activities at the SIMUL Node, as are agreed by the Board of Directors according to paragraph 6. This target budget is to be used for planning purposes. The actual Node budget for a given financial year is confirmed in advance in a meeting of the Board of Directors. The minimum Node budget is € 50,000.00 per annum (Article 7.2 + Annex 3 of the Convention).

Within the specified budget of € 50,000.00, each Institution in the Consortium determines annually the share of funding it intends to make available for the Node's activities. It is agreed that each Institution is responsible towards the other members of the Consortium for sharing the overall funding of the Node budget. This funding will be partly transferred to the Node administration (managed by the Department of Mathematical Sciences “G.L. Lagrange” – DISMA, Politecnico di Torino) and partly used in each Institution within the Consortium.

It is agreed that for the first year (2017) the commitment of each Institution in the Consortium will be as follows:

€ 20,000.00 for Università La Sapienza, of which € 4,000.00 transferred to the Node administration;
€ 7,000.00 for Università Tor Vergata, of which € 1,000.00 transferred to the Node administration;
€ 5,000.00 for Università dell’Aquila, of which € 1,000.00 transferred to the Node administration;
€ 5,000.00 for Politecnico Torino, of which € 1,000.00 transferred to the Node administration;
€ 13,000.00 for Politecnico Milano, of which € 1,000.00 transferred to the Node administration.

For each of the following three years (2018 to 2020), the annual contributions to be transferred to the Node administration will be determined by the Node Council. Each of the above contributions will be paid within February 1st of each year, upon a debit note issued by the Node administration.

Either way, the overall funding will be clearly identified as pertaining to the initiatives developed by the SIMUL Node and forming its budget. The transactions within this budget line will be administered by the Director of the SIMUL Node and will be reported annually to the Director of CECAM who will include the accounts of all Nodes in the complete annual Financial Report to be presented to the Council of CECAM as required by paragraphs 6.10(vi), 6.10(vii), 6.14(i), 6.21(iii), and 7.2 of the CECAM Convention.

8 Renewal or termination of Agreement

This Agreement will terminate on December 31, 2020 having been in force for four years. At least 3 months before the Council meeting immediately preceding the above termination date of the Node agreement, the SIMUL Node writes to the President of the Council stating its wish either to continue or to cease Node activities. In the former case, the Node may propose

amendments to its agreement for the consideration of the Council. The Council then discusses this statement at its next meeting and decides on renewal or termination.

Signatures:

Lausanne, _____

Prof. Christoph Dellago
CECAM Council President

Roma, _____

Prof. Eugenio Gaudio
Rettore dell'Università degli Studi di Roma "La Sapienza"

Roma, _____

Prof. Giuseppe Novelli
Rettore dell'Università degli Studi di Roma "Tor Vergata"

L'Aquila, _____

Prof. Paola Inverardi
Rettore dell'Università degli Studi dell'Aquila

Torino, _____

Prof. Marco Gilli
Rettore del Politecnico di Torino

Milano, _____

Prof. Ferruccio Resta
Rettore del Politecnico di Milano