

PARIS INVITATION TO ICM 2022





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Letter of invitation

On behalf of the French mathematical community, we are delighted to invite the International Congress of Mathematicians 2022 to the city of Paris from August 9 to 17, 2022. Our bid to host this important event is supported by the French State and public organizations, by the French mathematical institutions and the main European mathematical societies.

As a country with a rich mathematical heritage and a long tradition of hospitality for scientific gatherings, we believe we have certain obligations towards the international mathematical community. Hosting the ICM will provide a unique opportunity to make mathematics truly open to the world and to transfer knowledge to future generations. In this spirit we plan to organize a wide array of schools ranging over the entire mathematical spectrum before and after the ICM. These will be aimed at young mathematicians from developing countries. Financial support will also be made available to allow them to take part in these schools and in the ICM. We also plan to hold a large number of innovative public awareness activities in 2022 and beforehand.

We very much look forward to welcoming our colleagues from all over the world to Paris, the place where Hilbert presented his list of problems more than a century ago. The entire French mathematical community stands behind this bid and is entirely committed to the success of ICM 2022!

The Paris ICM 2022 bid committee

Committees and supporting institutions

The Paris ICM 2022 Committee

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Sylvie Benzoni-Gavage

University of Lyon

Stéphane Cordier

University of Orléans & AMIES

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CNRS & Paris-Dauphine University

Étienne Gouin-Lamourette

Fondation Sciences Mathématiques de Paris

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University of Toulouse

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Pierre and Marie Curie University

Anne Philippe

University of Nantes

Fabrice Planchon

Nice Sophia Antipolis University

Bertrand Rémy

École polytechnique

Denis Talay

Inria Sophia Antipolis

Supporting Institutions

CNRS National Center for Scientific Research

Inria French National Institute for Computer Science and Applied Mathematics

Académie des Sciences French Academy of Sciences

SFdS French Statistical Society

SMAI Applied and Industrial Mathematics Society

SMF French Mathematical Society

Labex Bézout

Labex Carmin IHP-IHÉS-CIRM-CIMPA

Labex AMIES Agency for Interaction of Mathematics with Business and Society

Fondation Mathématique Jacques Hadamard

Fondation Sciences Mathématiques de Paris

The Paris ICM 2022 Advisory Board

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Scuola Normale Superiore di Pisa

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University of Oxford

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Freie Universität Berlin

Official letters of support

LE PRÉSIDENT DE LA RÉPUBLIQUE

Paris, le 1 3 JAN. 2016

Mesdames et messieurs les membres du Comité exécutif,

La communauté mathématique française dans son ensemble (chercheurs issus du monde de l'université et de l'industrie) souhaite organiser l'édition 2022 du Congrès international des mathématiciens (ICM) à Paris.

La présidence de la République française soutient cette initiative.

Après avoir accueilli le congrès international de Mathématiques en 1900 puis en 1970, la France serait très honorée d'accueillir à nouveau la plus prestigieuse des rencontres académiques de Mathématiques.

La France est fière de la pérennité de son excellence mathématique au plus haut niveau international. Depuis des siècles, les mathématiciens français ont joué un rôle particulier dans le rayonnement de cette discipline, en développant de nouvelles théories ou des connections nouvelles avec d'autres champs scientifiques ou technologiques. La communauté mathématique française est toujours très active comme l'atteste la participation importante des mathématiciens français en tant qu'orateurs invités et l'obtention de la médaille Fields par le mathématicien franco-brésilien Arturo Avila lors du dernier congrès à Séoul en 2014.

En outre, le système français d'éducation intègre toujours une forte dimension mathématique à tous les niveaux depuis l'école élémentaire jusqu'aux établissements d'enseignement supérieur (Université et « Grandes Ecoles »).

Dans le cas où l'organisation de l'ICM 2022 lui serait confiée, la France s'engage à faire rayonner cet événement à la hauteur des enjeux qu'il recouvre.

D'abord, pour relever les défis scientifiques du 21^{ème} siècle, la France entend soutenir l'éducation et la recherche à son plus haut niveau. Ce congrès sera un des jalons du soutien inconditionnel de la France à ces enjeux et participera à la diffusion internationale des savoirs et des expertises.

Ensuite, étant donné le rôle de la France en Europe, le congrès aura également un impact significatif sur la recherche et l'éducation dans toute la communauté européenne. Evènements satellites, activités de sensibilisation et projets en partenariat avec l'industrie seront donc organisés en France et dans de nombreux autres pays européens, ce qui contribuera à accroître la visibilité de la science telle qu'elle se fait aujourd'hui.

Enfin, le congrès offrira l'occasion d'accueillir des chercheurs de tous les pays. Nous encouragerons en particulier les organisateurs à inviter de jeunes mathématiciens de pays en développement. Un effort tout particulier sera conduit en faveur des étudiants et chercheurs provenant d'Afrique. La France s'appuiera sur sa longue et forte tradition de collaborations avec les pays africains et en particulier (mais pas uniquement) avec les pays francophones d'Afrique.

La France a une solide expérience en matière d'accueil d'évènements internationaux. Paris et plus généralement la France tout entière, mettra tout son savoirfaire pour accueillir au mieux la communauté mathématique venue des quatre coins du monde. Je suis certain que l'organisation de l'ICM 2022 en France sera une formidable réussite.

Notre communauté scientifique est plus que prête à organiser un événement de si grande envergure, et la France est prête à apporter toute l'assistance nécessaire à la mise en place de l'ICM 2022 à Paris.

En espérant vivement que l'Union mathématique internationale considèrera favorablement la proposition française concernant l'édition 2022 du Congrès international des mathématiciens,

Je vous prie d'agréer, Mesdames et Messieurs les membres du Comité exécutif, l'expression de ma très haute considération.

Bin ivous

François HOLLANDE

International Mathematical Union Secretariat Markgrafenstr. 32 D-10117 Berlin, Germany



LE PRÉSIDENT DE LA RÉPUBLIQUE

Paris, le 1 3 JAN, 2016

Dear Executive Committee members,

The French Mathematical community as a whole (researchers from Academia and Industry) wishes to organize the 2022 edition of the International Congress of Mathematicians (ICM) in Paris, France.

On behalf of the French Republic, I am happy to announce our commitment to support this project.

After having hosted the ICM in 1900 and 1970, France would be quite honored to again host the most prestigious academic meeting in mathematics.

France has a very long and strong tradition in mathematics. For several centuries French mathematicians have been playing a key role in the development of their field, either by con-structing fruitful new theories, or by initiating new connections with other scientific or tech- nological fields. The French mathematical community is quite active as illustrated during the ICM 2014 in Seoul, Korea, by the French-Brazilian Fields medalist A. Avila and the French invited speakers. In addition, the French education system still focuses on strong mathematical training illustrated at all levels, from elementary school to higher education institutions, universities as well as prestigious engineering and graduate schools ('Grandes Ecoles').

It is our vision that the ICM 2022 in Paris will be an opportunity to fulfill three main objectives.

First, as the scientific challenges of the 21st century require underscoring research and education at the highest level, this congress will be a landmark towards this goal, disseminating knowledge and expertise internationally.

Second, as the scope of modern mathematics covers a broad scientific spectrum including academic research, education and industrial partnerships, the congress will drive new dynamics within the academic and industrial communities. It is in particular expected that numerous satellite conferences will take place all over France and Europe, attracting scientists on the hot topics of the international research in mathematics. The congress will also increase the public visibility of contemporary science.

Third, the congress will be an opportunity to strengthen the French tradition of welcome, education and openness to young researchers from all countries, particularly those coming from developing countries. A specific intensive effort will concern mathematicians and students from Africa, which can be seen as one of the key features of the ICM 2022 in Paris. Owing to its history and geographical location, France has a long tradition of intensive scientific training and collaborations with African countries, particularly (but not exclusively) with French speaking countries, which is a natural foundation for receiving a large number of African participants.

France has an extensive experience in hosting international events. Paris, and more generally the whole French nation, will make every effort to welcome the mathematicians from all over the world, and we will make sure that their stays are both comfortable and affordable. I am certain that the ICM 2022 in France will be a resounding success.

France will offer all possible support for the organization of the ICM. I invite you to carefully examine the merits of France's proposal to host the ICM 2022.

Sincerely yours.

François HOLLANDE

International Mathematical Union Secretariat Markgrafenstr. 32 D-10117 Berlin, Germany





MINISTERE DE L'EDUCATION NATIONALE, DE L'ENSEIGNEMENT SUPERIEUR ET DE LA RECHERCHE

La Ministre de l'Education nationale, de l'Enseignement supérieur et de la Recherche Le Secrétaire d'Etat chargé de l'Enseignement supérieur et de la Recherche

AP/fm/2015 / n°3

Paris, le - 7 DEC. 2015

TRADUCTION DE COURTOISIE

Dear Executive Committee members of the International Mathematical Union (IMU),

The French Mathematical community as a whole (researchers from Academia and Industry) wishes to organize the 2022 edition of the International Congress of Mathematicians (ICM) in Paris, France.

Science, education, industrial partnerships and interdisciplinary research are among the priorities of our government to address the scientific challenges of the 21st century. Mathematics is a key field at the crossroads of many scientific developments.

The French mathematical community is strongly involved at the international level, and it is undoubtedly qualified and experienced to welcome the most prestigious academic meeting in mathematics.

The congress will be an opportunity to welcome researchers from all countries. I particularly encourage the organizers to welcome young mathematicians from developing countries. My ministry will fully support the effort towards African mathematicians and students.

Owing to the role of France in Europe, the congress will also have a significant impact on research and education in all the European community. Satellite meetings, outreach activities and industrial partnerships are thus expected to be held in France and in many other European countries.

Our scientific community is more than ready to organize such a large-scale event, and the ministry of Research and Education stands ready to offer any needed assistance to the organization of ICM 2022 in Paris.

I very much hope that IMU will favorably consider the French proposal to organize the 2022 edition of the International Congress of Mathematicians.

Sincerely yours,

Najat VALLAUD-BELKACEM

V. Zelhear

Thierry MANDON

21 rue Descartes - 75231 Paris cedex 05 Tél: 01 55 55 90 90



Paris, le - 5 JAN, 2015

Dear Executive Committee members of the International Mathematical Union,

I am very pleased to fully support the French mathematical community application to organize the 2022 edition of the International Congress of Mathematicians - ICM in Paris. ICM 2022 would be a most considerable event for the French and European scientific communities. It will have a strong impact on research and education.

The City of Paris and the Paris area enjoy an exceptional concentration of scientists and students coming from all over the world. In particular, Mathematics plays a very important role in the scientific activities in the many Paris prestigious graduate schools (École normale supérieure, École polytechnique, etc.), universities (Pierre et Marie Curie, Paris Diderot, Orsay), institutions (Institut Henri Poincaré, Institut des hautes études scientifiques, etc.) and academic research laboratories (CNRS, Inria, Inra, etc.).

Paris offers an incredible number of opportunities and activities. In particular, it has an intensive cultural life. We will be quite happy to arrange important cultural events during the ICM.

Our city can boast of a geographical location facilitating easy access, efficient public transport, state-of-the art equipment and high-quality conference venues and accommodations.

I can assure you that our city will help the Committee by any means possible to facilitate the ICM 2022 and sincerely hope that you will grant Paris the privilege and honour of hosting the ICM 2022.

Yours faithfully.

Anne HIDALGO

Hune Hidalpo

La Présidente

216-1242

2 2 JUIN 2016

Paris, le

Dear Executive Committee members of the International Mathematical Union (IMU),

I am very pleased to fully support the French mathematical community application to organize the 2022 edition of the International Congress of Mathematicians - ICM in Paris. ICM 2022 would be a most considerable event for the French and European scientific communities. It will have a strong impact on research and education.

The Paris area within the Région Ile-de-France enjoy an exceptional concentration of scientists and students coming from all over the world. In particular, Mathematics plays a very important role in the scientific activities in the many prestigious graduate schools of the Paris area (Ecole normale supérieure, Ecole polytechnique, etc.), universities (Pierre et Marie Curie, Paris Diderot, Orsay), institutions (Institut Henri Poincaré, IHES, etc.) and academic research laboratories (CNRS, Inria, Inra, etc.).

In addition, the Région Ile-de-France counts many research laboratories which are international leaders in their domains: e.g. Cédric Villani (Fields medalist in 2010) and Arturo Avila (Fields medalist in 2014) work in research laboratories located in Ile-de-France. Many institutions and foundations playing a key national and international role in Mathematics are also located here, Institut Henri Poincaré, Fondation des Mathématiques de Paris, Fondation de Mathématiques Jacques Hadamard, Labex Bezout, the laboratories of Ecole Polytechnique, Ecole Normale Supérieure, Université de Cergy Pontoise, Université Paris-Sud, etc.

Due to the high quality of the mathematicians in Ile-de-France, the regional council, following the recommendation of the regional scientific council, was giving a significant financial support to the Network of Mathematics in Ile-de-France from 2011.

Conseil régional 33, rue Barbet-de-Jouy – 75359 Paris cedex 07 SP Tél.: 01 53 85 53 85 – Fax: 01 53 85 53 89 www.iledefrance.fr important cultural events during the ICM.

The Région Ile-de-France has a strong experience in hosting international events. It

The Région Ile-de-France has a strong experience in hosting international events. It will strive to provide all the convention, transport, and accommodation facilities.

activities. In particular, it has an intensive cultural life. We will be quite happy to arrange

Paris and the Région Ile-de-France offer an incredible number of opportunities and

Paris, the Région Ile-de-France and more generally the whole French nation, will make every effort to welcome mathematicians from all over the world. We will make sure that their stays are both comfortable and affordable.

I can assure that the Région Ile-de-France will help the Committee by any means to facilitate the ICM 2022 and I am certain that ICM 2022 in Paris, France, will be a most successful event.

I look forward to welcoming all the IMU members and participants of the ICM 2022 in our Région.

Sincerely yours,

Best regards

Valérie PECRESSE

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REPUBLIQUE FRANÇAISE



Highlights and events

An event open to the world

- Mathematics in France
- Summer schools aimed at developing countries
- Public awareness
- Mathematics and industry



MATHEMATICS IN FRANCE

A WELL-ESTABLISHED TRADITION

Mathematics in France has a long history going back at least to Viète, one of the creators of modern algebra in the 16th century. At around the same time the first chair of mathematics was created at Collège de France. In the next century mathematicians like Fermat, Descartes, Pascal, and Clairaut played an important role in the development of what would become modern mathematics. Many great scientists entered the scene at around the time of the French Revolution with D'Alembert, Laplace, Lagrange, Legendre, Condorcet, Monge, Fourier, Galois, Liouville, Cauchy, Chasles, Carnot, Germain, Poisson.

The revolutionary period saw also the creation of École polytechnique and École normale supérieure, two institutions that were endowed from the start with prestigious chairs of mathematics. Since then France has successfully developed a strong mathematical school, ranging over all fields of research, from the most fundamental to the most applied.

Learned societies were created in France as early as the 17th century, with the French Academy of Sciences (1666). The French Mathematical Society (SMF) was founded by Chasles in 1872, it was the third such society created in the world. The Société de Statistique de Paris, launched in 1860, later became the SFdS. The Société de Mathématiques Appliquées et Industrielles (SMAI) was founded more recently in 1983 and testifies of the growing importance of applied and industrial mathematics.

The first French mathematical journals were created throughout the 19th century: 1810, Annales de mathématiques pures et appliquées by Gergonne; 1836, Journal de mathématiques pures et appliquées by Liouville; 1864, Annales scientifiques de l'École normale supérieure; 1872, Bulletin de la Société mathématique de France; 1887, Annales de la Faculté des Sciences de Toulouse by Stieltjes.

MATHEMATICS IN FRANCE TODAY

As many as 4 000 mathematicians work as academics in France. Around 10% of them are full time researchers in governmental research organisations like CNRS (French National Centre for Scientific Research), Inria (French Institute for Research in Computer Science and Automation) or INSEE (National Institute of Statistics and Economic Studies), and also CEA and INRA. The vast majority of mathematicians have a position at a University or at some other higher education establishment (Grande École), not forgetting prestigious institutions like Collège de France, Institut Henri Poincaré and IHÉS. Research in mathematics takes place in around 100 research centers, most of them managed jointly by the CNRS and a University. The CNRS is divided into ten scientific departments and one of them - INSMI - is fully dedicated to mathematics and their applications. It plays a key role in structuring the French mathematical community.

This unique organizational design has proved to be very efficient, allowing the French mathematical school to flourish successfully in essentially all parts of mathematics.

Industry, notably big companies like EDF, Engie, Thalès, and banks, is actively involved in the development of research in applied mathematics, most often in collaboration with academia. On a larger scale, mathematics has a very strong impact on the French economy and job market: according to a recent study produced by consulting firm CMI, mathematics impacts directly around 15% of France's GDP and 9 % of jobs with high added value.

CEA : Commissariat à l'énergie atomique et aux énergies alternatives

NRA : Institut national de la recherche agronomique

OPEN TO THE WORLD

France has a long tradition in training and hosting mathematicians from all around the world. Currently, amongst the 400 PhDs in mathematics awarded every year in France, around 55% of the recipients are from abroad and 50% will later find a position outside France. Numerous programs and networks at all levels (pre-doctoral, doctoral, post-doctoral) have been created in the last years to fund fellowships for foreign students.

French research agencies and the French Ministry of Foreign Affairs support a large number of international programs. A particular role is played by CIMPA (International Centre for Pure and Applied Mathematics), a non-profit international organization established in France, which promotes international cooperation in mathematics towards developing countries. Over the past few years, CNRS has launched a dozen international math laboratories all around the world.

Many mathematicians from all over the world have already had the opportunity to experience a visit to the CIRM in Luminy or the Institut Henri Poincaré in Paris, where workshops and thematic programs are organized on a regular basis. Since the days of the 1900 ICM in Paris, when Hilbert announced his famous list of unsolved problems, France has become one of the most popular destinations in the world for organizing international conferences and workshops, with several hundred events every year, distributed all over the country.



SUMMER SCHOOLS AIMED AT DEVELOPING COUNTRIES

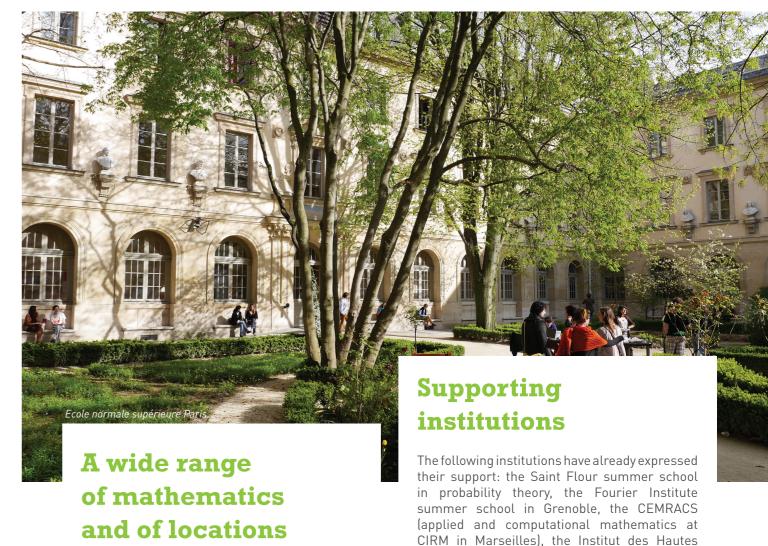


The French mathematical community is deeply committed to international scientific cooperation with emerging countries, as evidenced by a number of initiatives, both personal and institutional. For instance, some mathematical departments abroad benefited from the presence of French mathematicians from their earliest foundation. Today, some of the international CNRS research units (UMI) located around the world are partly established in some of these countries. This support has evolved over time to keep up with best practices in the dissemination of mathematical knowledge.

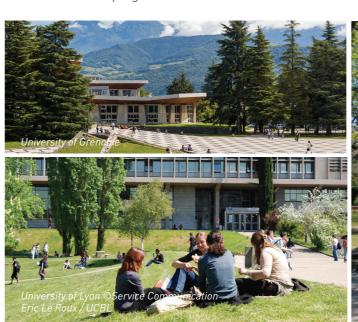


The specific activities we will develop on the occasion of ICM 2022 in Paris are mainly a series of summer schools taking place right before or after the ICM. Although not completely dedicated to young mathematicians from developing countries, these summer schools will be designed to welcome them in optimal conditions. We see ICM 2022 in Paris as a great opportunity to offer these young colleagues access to state of the art knowledge in their fields of interest. Over 400 participants from developing countries will be invited to the summer schools and the ICM congress (all expenses covered).

In addition to that initiative, financial support for participation of a total of at least 600 mathematicians from developing countries to the ICM congress will be arranged.



The summer schools involved in this project will cover the widest possible scientific spectrum, from pure mathematics to industrial applications of mathematical concepts and techniques. The hosting venues will also be spread out all over France. The most famous summer schools and institutions have agreed to participate in the program.





Études Scientifiques (IHÉS), International

Center for Pure and Applied Mathematics

(CIMPA), the Institut de Mathématiques de

Jussieu-Paris Rive Gauche, University Paris-

Sud (Orsay), Écoles normales supérieures in

Lyon, Paris and Rennes, École polytechnique...

All schools will offer excellent housing

options, an attractive location and a high-level

scientific environment.

Paris Invit

PUBLIC AWARENESS

FRANCE HAS A STRONG TRADITION OF DISSEMINATING MATHEMATICS AT ALL LEVELS OF THE SOCIETY

Many large and successful events for the general public have been organised in France in the last couple of decades. After the global initiative 2000, a mathematical year, three large scale conferences entitled Mathématiques à venir were successively organized in the 2000s. Open to the general public, the media and decision makers, they gathered several hundred participants and were widely reported in the media. In addition, updated versions of the international exhibition Experiencing mathematics have been circulating throughout France, reaching a large number of students. The Mathematics of Planet Earth initiative, officially launched in March 2013 at the Unesco headquarters, led many French mathematicians to write short accessible blog posts on what became Brèves de maths

Some public websites or newsletters involving French mathematicians:

Images des mathématiques, Interstices, Brèves de maths or MADDMaths

Raising Public Awareness (RPA) activities in mathematics are supported by the CNRS through Around Awareness in Mathematics (AuDiMath), a network which brings together mathematicians involved in those activities and RPA specialists from mathematical research institutes as well.





Organizing the ICM in Paris will provide a unique opportunity to generate activities and events intended for the general public, with the triple aim of attracting more students in mathematical studies, of enhancing the French mathematical heritage, and of disseminating the most recent outcomes of mathematical research.

HERE ARE SOME EXAMPLES OF ACTIVITIES WE INTEND TO IMPLEMENT:

- Launch a **call for projects** to all associations working in France with students and with the general public in the scientific areas. This will ensure a series of activities centered around mathematics and its applications takes place all over the year 2022 and all over France.
- In collaboration with the FSMP, set up a collection of short videos 'Mathematicians in Paris', consisting of short interviews with mathematicians from all around the world who will share their own unique Paris experience.
- In collaboration with the literary group OuLiPo, which has been closely linked to mathematics since its foundation in 1960 by Raymond Queneau and François Le Lionnais, we will publish a French-English bilingual book Mathematical itineraries in Paris. This will be complemented by a dedicated website and by a series of 'mathematical walks' tracking events of mathematical interest. Road maps will be made available in interactive digital format and signs will be posted for the participants.
- Working with existing groups and institutions throughout the country, we will organize special mathematical exhibitions in the main science museums in Paris (Cité des Sciences and Palais de la Découverte).

THE FOLLOWING INSTITUTIONS HAVE ALREADY EXPRESSED THEIR INTEREST IN ORGANIZING PUBLIC AWARENESS EVENTS AROUND THE ICM 2022:

- Cité des Sciences et de l'Industrie
- Palais de la Découverte
- Maison des Mathématiques et de l'Informatique (Lyon)
- Maison des Mathématiques (Paris)
- GDS AuDiMath
- MATh.en.JEANS
- Take advantage of the newly created **Mathematical Museum** (Maison des Mathématiques) at the Institut Henri Poincaré (to open in 2020) in order to organise many RPA activities during the whole of 2022.
- Work with the Bridges association, so that the Bridges 2022 conference on Mathematics, Music, Art, Architecture, Culture will take place in Paris around the time of the ICM.
- With the help of pre-existing networks we will create a comprehensive repository and catalog
 of past and current activities in France concerning RPA towards the young people and students
 catalog of books, videos and movies, exhibitions, comics, etc., contributing to keep alive that
 rich history of activities in France.
- With the sponsorship of cities and transportation companies, organize an **advertising campaign** about mathematics all over France, in subway stations, train stations, airports, etc.
- With the sponsorship of 'La Poste', **publish stamps** dedicated to the Paris ICM 2022.
- Work with the media to ensure that during 2022 a significant number of articles, programs and debates will be dedicated to mathematics and its importance to society.

Oul iPo : Ouvroir de l'ittérature Potentielle

MATHEMATICS AND INDUSTRY

Mathematical academic research and the industrial sector in France have a long and successful history of cooperation. The pioneering work of Jacques-Louis Lions had a huge impact on the development of synergies between mathematics and the business world. Examples of success stories in France, and elsewhere in Europe, can be found in a publication of the European Forward Look in Industrial mathematics (2010), where 22 out of the total 108 are from France, with a large proportion from major groups in energy (EDF, Alstom, CEA, Total), transportation (Renault, Peugeot, Airbus, EADS) and telecommunications (Orange).

Mathematics plays an essential role for growth and innovation. In France, this fact has been made explicit and measured in 2015 in "A study of the socio-economical impact of mathematics in France" produced by a French strategy consulting firm, CMI. This study shows that mathematics is an "essential asset for addressing tomorrow's challenges for knowledge, innovation and competitiveness". The impact of mathematics in terms of jobs is evaluated at 9% and the added value has been estimated at about 15% of total French GNP. Such impact studies had been previously done by Deloitte, in the UK in 2012, and in the Netherlands in 2014, using the same methodology and finding similar results. These studies proved the importance of mathematics in interaction with fast-growing sectors and key technologies.

Inria is an important actor in promoting collaborations between French laboratories in Applied Mathematics and Industry. Over the years, many universities, like Grenoble, Toulouse, Saclay have developed partnerships and joint projects with local companies.

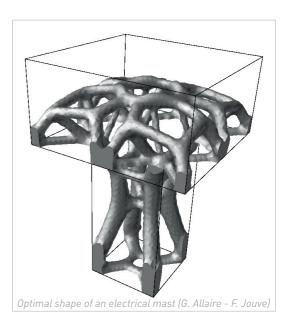
The French education system offers a wide range of specific programs to students interested in positions in industry involving mathematical skills: engineering schools, Master's programs in mathematical engineering and data science, etc.

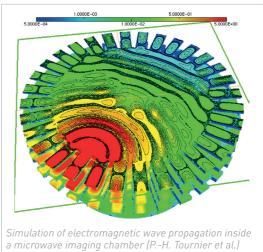


The need to coordinate and enhance the relationship between the mathematical community and the industrial/services sector led to the creation of a specific national agency in 2011, AMIES, and of a new European coordinating network, EU-MATHS-IN, in 2013. A particular effort has been made to promote collaborations with small and mediumsized enterprises and startup companies. Within 4 years, AMIES succeeded in doubling the number of companies that have active collaborations with mathematical departments, and the goal is to maintain a 20% growth rate in order to double those numbers again by 2020. To this end, AMIES initiated several programs such as for instance SEME (Semaines d'Études Math-Entreprises), inspired by the ESGI (European Study Groups with Industry), launched in Oxford in 1968. Several international SEME sessions will be organized in 2022, in the wake of ICM 2022. Let us also mention the success of the Math Job Fair (FEM), with an increasing number of participants (more than 1800 in the fourth job fair in 2014). On the initiative of CNRS and SMAI, with the support of Inria, AMIES, SMF and SFdS, workshops are organized several times a year to allow mathematicians from academia and industry to present and discuss new results and possible new applications.

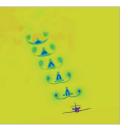
The organization of ICM 2022 in Paris will be supported by large French companies as explained in the letter of intent from MEDEF, the largest employer federation. We also anticipate that some of the most innovative and technological small and medium-sized enterprises and startup companies will support events showcasing the importance of mathematics for the acceleration of innovation and the development of the technology.

As well as organizing a number of SEMEs as satellite events of ICM 2022 in Paris, other activities, such as a series of exhibitions showcasing success stories of industrial collaboration could be organized in Paris and other French cities in 2022.

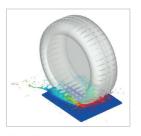


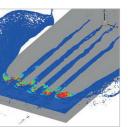






Photography and numerical prediction of wing-tip vortices (INRIA Gamma3 Team)





Modelling for tire aquaplaning prediction (Michelin - LHEEA Lab)



Le Président

Helge HOLDEN
Secretary
International Mathematical Union
Secretariat
Markgrafenstr. 32
D-10117 Berlin
Germany

Paris October 14th, 2016

Dear Executive Committee members of the International Mathematical Union,

I am very pleased to fully support the French mathematical community application to organize the 2022 edition of the International Congress of Mathematicians – ICM in Paris. ICM 2022 would be a most considerable event for the French and European scientific communities. It will have a strong impact on research, education and industrial developments.

The MEDEF (French Business Confederation) is a strong actor of the French industrial world. Promoting scientific and technical innovation is one its main objectives to support competitiveness.

Nowadays Mathematics play a very important role in the French education system and in the strong partnerships between academic laboratories and industry. Collaborative research with the industry and transfer to industry are priorities for major public research institutes such as Inria as well as for the universities of Bordeaux, Grenoble, Nice, Paris, Saclay, Strasbourg, Toulouse among many others. The Paris area enjoys an exceptional concentration of scientists and students who develop interactions and partnerships with high-tech companies, start-ups and financial business firms. It also enjoys an exceptional concentration of private laboratories (Thalès, EDF, Engie, banks, CEA, etc.) which commit research in applied mathematics to the highest quality.

The national agency AMIES (*Agence pour les mathématiques en interaction avec les entreprises et la société*) facilitates and amplifies the interactions between academic research in mathematics and industry. In addition, AMIES is part of the Eu-maths-in European initiative. This European dimension is conform to the spirit of the French application to organize ICM 2022 in Paris and to the MEDEF objectives.

It is clear to us that ICM 2022 will be an excellent opportunity to advertise the impacts of mathematics in innovation, technology and industry and to impulse new partnerships. I am convinced that ICM 2022 in Paris, France, will be a most successful event.

Yours sincerely,

Pierre GATTAZ

55, Avenue Bosquet - 75330 Paris Cedex 07 - Tél. : 01 53 59 19 19 - Fax : 01 45 51 20 44 Internet : http://www.medef.com





A European dimension

Benefiting from the support and the cooperation of our colleagues from Europe, Paris ICM 2022 will involve all the stakeholders in our community

CARLOS MOEDAS

Member of the European Commission

THE EUROPEAN COMMISSIONER FOR RESEARCH, SCIENCE AND INNOVATION

Brussels, Ares(2016)s- 5018160

Dear Professor Mori,

I am writing to you in your capacity as President of the International Mathematical Union (IMU) in relation with the bid made by the French mathematical societies for organising the 2022 edition of the International Congress of Mathematicians (ICM) in Paris.

The French mathematical community is strongly involved at the international level, and is widely qualified and experienced to be given responsibility for organising this prestigious academic meeting in mathematics. This would be a very significant event, taking place 122 years after the epoch-making 1900 ICM in Paris.

In my experience as European Commissioner for Research, Science and Innovation, it is clear that France plays a major role in science across Europe. Hosting the 2022 ICM in Paris would therefore also have a significant impact on research in Europe at large. This wider impact will be further enhanced given that the organisers have committed to ensure that satellite meetings, outreach activities and industrial partnerships will not only be held in France but in several other European countries. This is also relevant as France is the only Member State bidding to host the event.

I very much hope that the IMU will consider favourably the French bid to hold the 2022 edition of the ICM in the European Union.

I would appreciate if you could share this letter with the members of the Executive Committee of the IMU.

Yours sincerely,

Carlos MOEDAS

Professor Shigefumi Mori President International Mathematical Union

By email only: Mori@kurims.kyoto-u.ac.jp



THE EUROPEAN MATHEMATICAL SOCIETY

Pavel Exner, President

Prof. Pavel Exner, MAE
Doppler Institute
Břehová 7
11519 Prague, Czech Republic
phone: +420-266-173-293
cell: +420-776-154-823
e-mail: ems@ujf.cas.cz
url: http://www.euro-math-soc.eu/

June 30, 2015

Prof. Shigefumi Mori IMU President RIMS, Kyoto University Kyoto 606-01, Japan

Dear Professor Mori,

I write to you on behalf of the European Mathematical Society. The matter in which I am approaching you concerns the French intention, announced during the General Assembly of the IMU held in Gyeongju in August last year, to make a bid for the organization of the International Congress of Mathematicians in 2022 in Paris, preceded by the General Assembly in Strassbourg.

Europe is the birthplace of the ICMs and the modern mathematics would not be what it is now without the roots in our continent. We are aware that the world is opening and becoming more connected and we appreciated that the last two congresses and the forthcoming one gave a boost to developments of mathematics in places representing a future promise, but we also think it would be appropriate if the congress returns after a sixteen year break to our continent.

The virtues of French mathematics need no recommendation, of course, to say nothing of the symbolism of returning, for the first time after 122 years, to the place where Hilbert stated his list of problems. Our French colleagues have already formed a preparatory committee of people who are both excellent mathematicians and reliable organizers. However, we see the importance of the bid far beyond the national borders. Europe is and will be a patchwork, but its unity in diversity was always the source of its strength. We are convinced that our French colleagues make their proposal in the name of the whole European mathematical community. The EMS endorses it and if it will be successful, as we hope, we will do our best to contribute to making the congress a memorable event indeed.

With best regards I remain

Sincerely yours

Pavel Exner

The following European societies have expressed their endorsement

EUROPEAN MATHEMATICAL SOCIETY

and

BELGIAN MATHEMATICAL SOCIETY

CYPRUS MATHEMATICAL SOCIETY

CZECH MATHEMATICAL SOCIETY

DANISH MATHEMATICAL SOCIETY

EDINBURGH MATHEMATICAL SOCIETY

FINNISH MATHEMATICAL SOCIETY

GERMAN MATHEMATICAL SOCIETY

IRISH MATHEMATICAL SOCIETY

ITALIAN MATHEMATICAL UNION

ITALIAN SOCIETY FOR APPLIED AND INDUSTRIAL MATHEMATICS

ICELANDIC MATHEMATICAL SOCIETY

INSTITUTE OF MATHEMATICS AND ITS APPLICATIONS (UK)

JÁNOS BOLYAI MATHEMATICAL SOCIETY (HUNGARY)

LITHUANIAN MATHEMATICAL SOCIETY

LONDON MATHEMATICAL SOCIETY

LUXEMBOURG MATHEMATICAL SOCIETY

POLISH MATHEMATICAL SOCIETY

PORTUGUESE MATHEMATICAL SOCIETY

ROYAL DUTCH MATHEMATICAL SOCIETY

ROYAL SPANISH MATHEMATICAL SOCIETY

SOCIETY OF APPLIED MATHEMATICS AND MECHANICS (GERMANY)

SWEDISH MATHEMATICAL SOCIETY

THE SOCIETY OF MATHEMATICIANS, PHYSICISTS AND ASTRONOMERS OF SLOVENIA

TURKISH MATHEMATICAL SOCIETY

Satellite conferences in Europe

A formal call for proposals will be made in due time, but several institutions and conference centers across Europe have already expressed their intention to organize or host satellite conferences on the occasion of ICM 2022 in Paris.

Alfréd Rényi Institute of Mathematics, Budapest

Banach Center, Warsaw

Basque Center for Applied Mathematics, Bilbao

Center for Mathematical Analysis, Geometry and Dynamical Systems, Lisbon

Centro di Ricerca Matematica Ennio De Giorgi, Pisa

Charles University, Prague

ETH, Zürich

Hausdorff Center for Mathematics, Bonn

ICMAT, Madrid

Institut Mittag-Leffler, Djursholm

Isaac Newton Institute for Mathematical Sciences, Cambridge

London Mathematical Society

Wolfgang Pauli Institute, Vienna

In addition, within the French mathematical community numerous colleagues and institutions have already declared their willingness to organize satellite events in France.

The **European Women in Mathematics** association has expressed interest in organizing a **World Meeting for Women in Mathematics** in France, as a satellite event of ICM 2022.



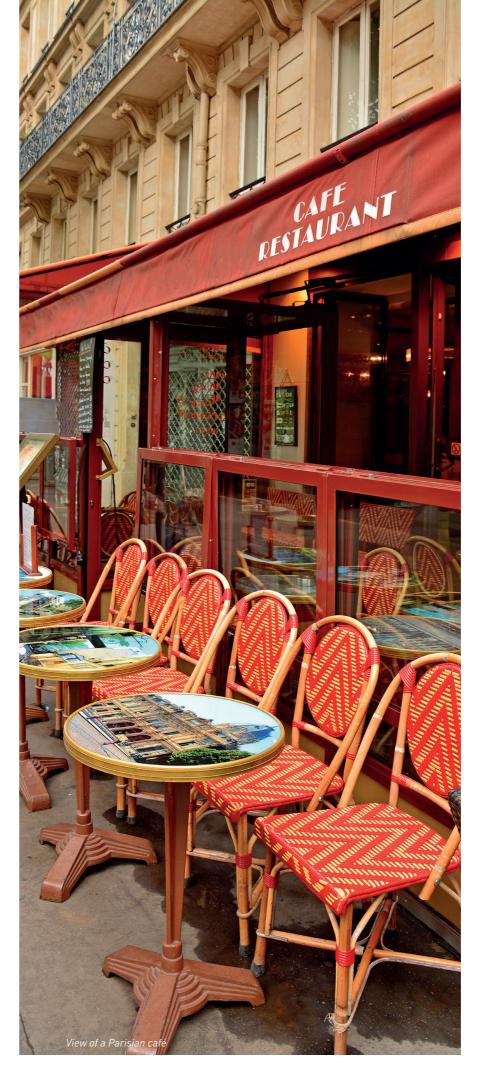
Paris says"*bienvenue!*" to ICM 2022



PARIS, THE PERFECT SETTING

Some names make us dream. Paris is one of them. Join us in a city where you can delight in the rich heritage of art and culture and in the famous French *art de vivre*. Come and enjoy the warmth and vivacity of this romantic city. Take the time to savor Paris and what it has to offer...

Paris is a dynamic and renowned cultural capital, always at the forefront of new trends and ideas. But it is also home to tradition and history. No matter what you are most inclined toward, you will always find, in the City of Lights, something exciting to experience and to match your tastes and expectations.



The Parisian touch

Paris knows that a city needs more than outstanding historical and cultural heritage to make it an attractive place to visit.

Fine dining, shopping and entertainment are an integral part of the city's art de vivre. The French capital offers 16,000 shops, 208 theatres and 83 cinemas – more choice than anywhere else. Big names in art, culture, fashion, design and cuisine can be found in the streets of Paris. Once or twice a week, shops and museums stay open until late in the evening, and when night falls and dinner has been savored, the bars, cabarets, discotheques, auditoriums and concert halls take the spotlight.

The global capital of gastronomy, Paris has more than 10,000 bars and restaurants, ranging from the traditional "brasserie" to the most exotic cuisine.

Many restaurants also have meeting rooms, so business and gastronomic can be combined. Enjoy!

ON THE MENU

Michelin star restaurants with top-class chefs, the new "fooding" stars who mix flavours from around the world with traditional cuisine, and small local restaurants offering innovative menus.

Paris' illustrious heritage and vibrant atmosphere are an everyday, everywhere experience.

TYPICAL LOCAL EXPENSES

DRINKS

Espresso 2€ Regular cappuccino 3€ Water (1.5 liter bottle) 1€ Soda 3€

RESTAURANTS

Meal for one in an inexpensive restaurant 12€
3-course meal for one in a mid-range restaurant 25€
Sandwich 2,70€

TRANSPORTATION

One-way ticket (metro and bus) 1,80€ Taxi pick-up charge 2,60€ Taxi fare 1,05€/km



AWELCOMING ATMOSPHERE FOR **ICIVI 2022**

On the occasion of this congress, special visibility will be offered to the congress and ICM 2022 delegates by the city of Paris:

- Main train stations and Airport terminals will advertise ICM 2022 and greet delegates.
- Main avenues leading to the convention center will feature welcome banners with ICM 2022 logo.
- Free shuttles will be available for departure transfers from the congress venue.

AS ALREADY ANNOUNCED, MS ANNE HIDALGO, THE MAYOR OF PARIS, HAS MARKED HER PERSONAL COMMITMENT TO SUPPORT THE **CANDIDACY TO HOST THE ICM 2022.**

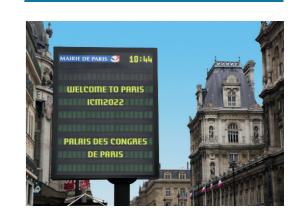
Mayor Hidalgo has signed a support letter and commits the City of Paris to:

- Offering complimentary use of the city's 180 billboards.
- Opening of the prestigious reception rooms of the City Hall to welcome ICM 2022 delegates in one of the most beautiful examples of Parisian architecture.

in the terminal building

GARE DU NORD Welcome and guidance information panels **Board announcements** every

Information desks with multilingual



EASY TO GET TO, **EASY TO GET AROUND**



It is easy, fast and convenient to reach Paris thanks to its central geographic position.

Paris' two international airports, Roissy Charles de Gaulle and Orly, a hub for 159 international airlines making access from all over the world very easy.

Charles de Gaulle airport (in the North) with its 7 terminals accepts all airlines and low-cost companies; there is an annual passenger flow of over 65 million people (more than the entire French population). This airport has direct shuttles to the Palais des Congrès de Paris.

Orly airport in the South of Paris is France's premier airport: built in the 1950s, domestic flights use this airport as well as low-cost companies and airlines from southern European

Direct bus lines link the airport to Paris; departure every 30 minutes (27 € roundtrip). Trains depart both ways every 5 minutes enabling the flow of passengers, tourists and convention participants to reach the city in a maximum of 30 minutes.

Beauvais-Tillé Airport is an airport near the city of Beauvais, located 85 km North of Paris. It is the tenth busiest airport in France and is mostly used by charter and low-cost airlines. A private scheduled bus service allows travelers to reach the Palais des Congrès at Porte Maillot in 75 minutes.

There are also 6 train stations in Paris.

The city can be reached by High Speed Trains ("TGV" in French) from most major European cities. 16 Eurostar roundtrips per day link the French capital to London and 28 Thalys to Brussels and Amsterdam. Barcelona has just been linked in 2013 and Madrid, Berlin and Milan will also be linked by TGV before the year 2019.

The ICM 2022 will benefit from an "official carrier" agreement with a global airline alliance as well as the French rail company SNCF.

This will ensure that ICM 2022 delegates get best possible travel rates and easy on-line registration (both global airlines and SNCF are engaged in disability support and CO2 compensation programs).



CONVENTION CENTRE AND HOTELS ARE VERY CLOSE TO EACH OTHER; THEREFORE A SHUTTLE SYSTEM FROM HOTELS TO THE VENUE IS NOT NECESSARY.

Everything is within Paris "city limits" and, if needed, public transportation is easily accessible.

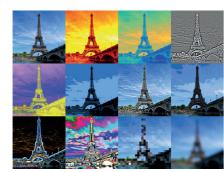
The easy-to-use and convenient Paris underground, bus and tram system crosses the city from North to South and West to East. A special rate "Paris Visite Pass" lets you enjoy unlimited travel throughout the city.

ICM 2022 delegates registration package will include a free Paris Transportation pass enabling them to use bus and metro lines as often as required during their stay in the French Capital.

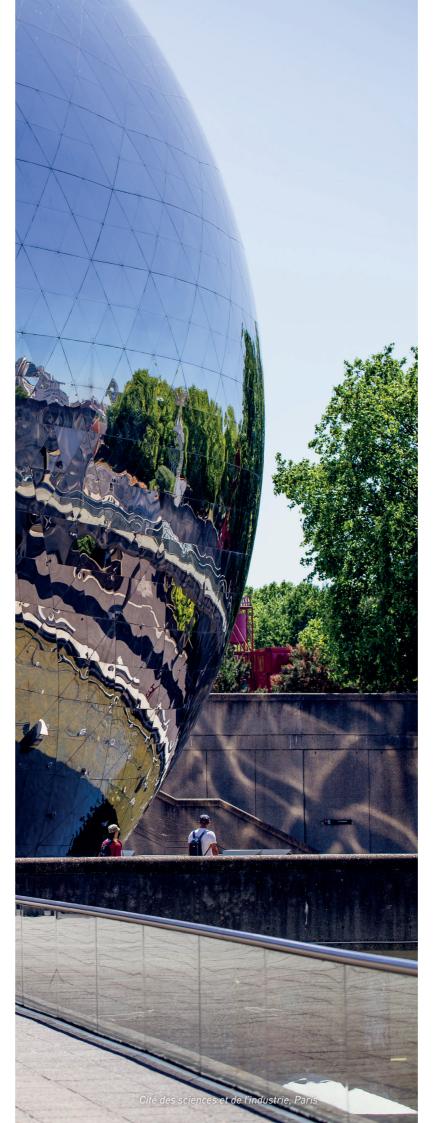
WHY NOT EXPLORE PARIS BY BIKE?

With more than 23.600 bikes available at 1.800 stations located every 300 meters all over the city, Vélib is a convenient and fun way to ride a bike in Paris.





©G. Peyré



Visiting Paris
with a disability:
hotels,
museums,
restaurants,
leisure,
transportation...

Plan your stay in Paris by discovering accessible places and activities, whatever your type of disability.



The Accessible Paris guide is available to consult and download online, or available in paper version at the Convention bureau information points.

Published in French and in English, this brochure provides all the information you

need on arriving in Paris, getting around in the capital, and enjoying its tourist attractions to the full when you have specific needs (physical, visual, hearing or mental disability); content includes:

- Different modes of adapted transport for getting to Paris: by plane, train, or road.
- Transport adapted to disabled people for getting around Paris.
- Exhibitions and activities which have been adapted for disabled visitors in various museums and monuments in Paris and the Paris region.
- Practical information on medical equipment and specific needs.

ICM 2022



Freedom of Travel & Circulation

France does not impose any official entry restrictions on persons entering the country.

All visitors (other than those carrying a European passport) travelling to France from overseas, including those attending congresses, must hold a valid passport and some countries need to obtain a tourist visa

France has one of the world's largest diplomatic network, second only to the network of the United States

Organizers will assist delegates with their visa application letters and requests with a special on-line tool on the congress website and in making the congress known throughout the French embassies and consulates network.

For further information, you may consult the Department of Immigration from the French Ministry of Foreign Affairs: www.diplomatie.gouv.fr

Paris is home to a variety of communities from the whole world and all languages are represented. Paris is not only the seat of UNESCO, and many other NGOs, it is also a vibrant multi-cultural city.

Paris values:
bringing together
people from
all over the world,
in a spirit of diversity,
respect, equality,
solidarity.

Security & Medical Assistance

Concerning security on site, access to the areas reserved for the ICM 2022 Congress will be strictly controlled. A registered security company will be hired to control access, which will only be possible to those delegates and participants, who are duly and properly badged.

In addition, Palais des Congrès de Paris as a Venue is classified as a first category Public Access Building (ERP in French).

"ERP" classification relates to French legislation concerning risks and a first category ERP classification entails the most stringent safety and security rules. Venues in this category must have all the measures in place to limit fire risks, to have clear and pre-designed evacuation routes, access for safety personnel and accessibility for disabled persons. They are even required to maintain a properly trained fire and safety brigade on site.

Finally, a first medical response team will be hired for the duration of the congress to give medical assistance to anyone who may need it.

CLIMATE

SUMMER (JUNE 21 TO SEPTEMBER 21):

When the summer season is at its height, you can enjoy some rest and relaxation and *joie de vivre* basking in the sun, on the café terraces, in the parks and on the beaches by the Seine.

Picnics abound and gourmets melt for the best ice cream in Paris.

Cinema and music celebrate: free films and concerts thrill the capital in the summer.

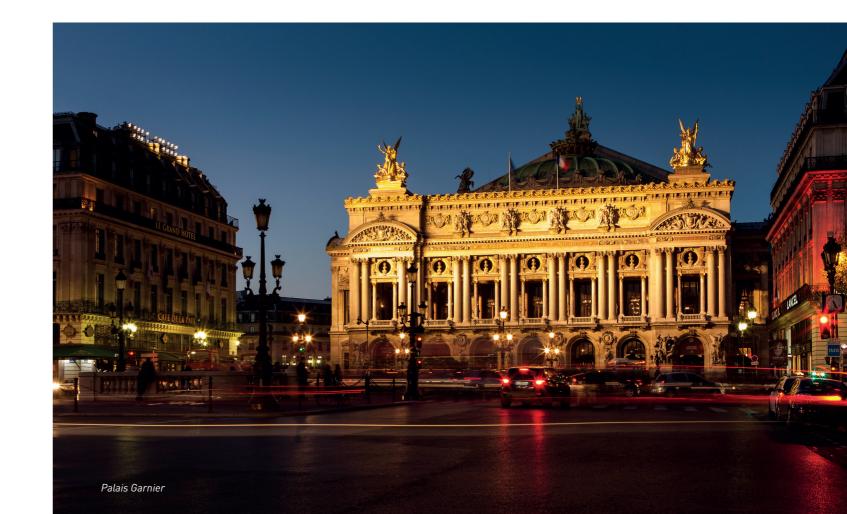
AVERAGE TEMPERATURE AND RAINFALL:

Min Max Rain in mi

June 13°C 23°C 59

July 15°C 25°C 59

August 14°C 24°C 64





The Palais des Congrès de Paris: the place to meet

LEADING VENUE FOR INTERNATIONAL CONGRESSES LOCATED IN PARIS 17^{TH} ARRONDISSEMENT, PORTE MAILLOT, A STONE'S THROW FROM THE CHAMPSELYSÉES.

The ICM 2022 at Palais des Congrès de Paris will give all delegates the opportunity to experience Paris like a Parisian. It offers all the space required and it is situated in the city center.

The venue has a Parisian atmosphere with many elements of the Parisian urban landscape present, such as the Morris columns, Parisian lampposts and benches.

Parisian bistros, bars, boutiques and the Arc de Triomphe with the world famous "Champs-Elysées" are within walking distance of the congress venue. An unforgettable experience for ICM delegates, who will really take advantage of all that the city of Paris has to offer.

THE VENUE WITH ITS EXTENSIVE TECHNICAL CAPABILITIES AND A HIGH FREQUENCY OF CONFERENCES, OFFERS A UNIQUE COLLECTION OF AMPHITHEATRES, MEETING ROOMS, MODULAR SPACES AND EXHIBITION SPACE TO HOST CONFERENCES, CORPORATE CONVENTIONS, TRADE SHOWS AND ENTERTAINMENT EVENTS:

- **32 000 sqm** including 19 000 sqm exhibition areas
- 4 auditoriums on 3 levels
- 20 breakout rooms
- 85 meeting rooms
- a VIP Club
- **TV studios** and **1 teleport** equipped with 14 dishes.

AN EXCEPTIONAL LOCATION IN DOWNTOWN PARIS:

- A WIDE RANGE OF TRANSPORTATION OPTIONS
- 40 YEARS OF EXPERIENCE
- 3 000 HOTEL ROOMS ON SITE
- OPTIMAL LAYOUT FOR ICM 2022, IN ONE BUILDING
- HOSPITALITY SERVICES

THE PALAIS DES CONGRÈS AND SUSTAINABLE DEVELOPMENT

Aligning its business with the various fields of sustainable development is one of Viparis' top priorities. As a player within the professional and consumer meetings industry, Viparis wants to lead the way in reconciling sustainable economic development and ephemeral events.

The Corporate Social Responsibility (CSR) vision is already evident in the diverse range of social backgrounds to be found among Viparis employees, the company's and continuous dialogue with stakeholders and its desire to integrate sustainable development into strategic projects.

As part of its ambitious policy concerning responsible sustainable development, Viparis properties (including the Palais des Congrès) have been awarded ISO 20121 certification (sustainable events management).

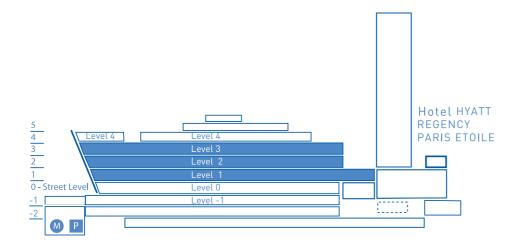




VENUE FLOOR PLAN

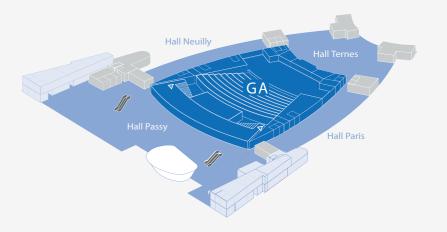
The Palais des Congrès de Paris overlooks the Porte Maillot square and is laid out on several levels. All rooms and spaces occupied by ICM 2022 will be on levels 1/2/3.

Moving between the congress levels will be very easy and fast thanks to large escalators and many lifts which also connect to the metro station, parking and shops levels (-1, -2 and 0).



Level 1

GRAND AMPHITHEATRE FROM 1813 TO 3723 SEATS PASSY ROOM FROM 40 TO 165 SEATS 23 MEETING ROOMS FROM 6 TO 65 SEATS



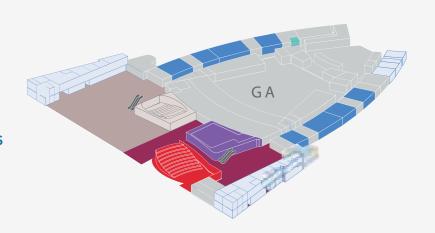
Level 2

5540 SQM HALL MAILLOT FOR EXHIBITION
BLUE AMPHITHEATRE 868 SEATS
(+ ACCESS TO GRAND AMPHITHEATRE)
MAILLOT ROOM 380 SEATS
9 CONFERENCE ROOMS FROM 30 TO 380 SEATS
27 MEETING ROOMS FROM 6 TO 70 SEATS

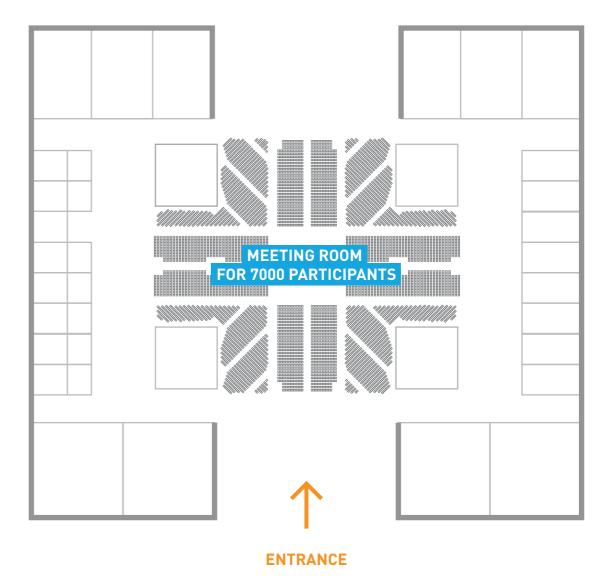


Level 3

3 000 SQM EXHIBITION AREA
AMPHITHEATRE BORDEAUX 650 SEATS
AMPHITHEATRE HAVANE 373 PLACES
8 CONFERENCE ROOMS FROM 30 TO 380 SEATS
35 MEETING ROOMS FROM 5 TO 80 SEATS
V.I.P. CLUB







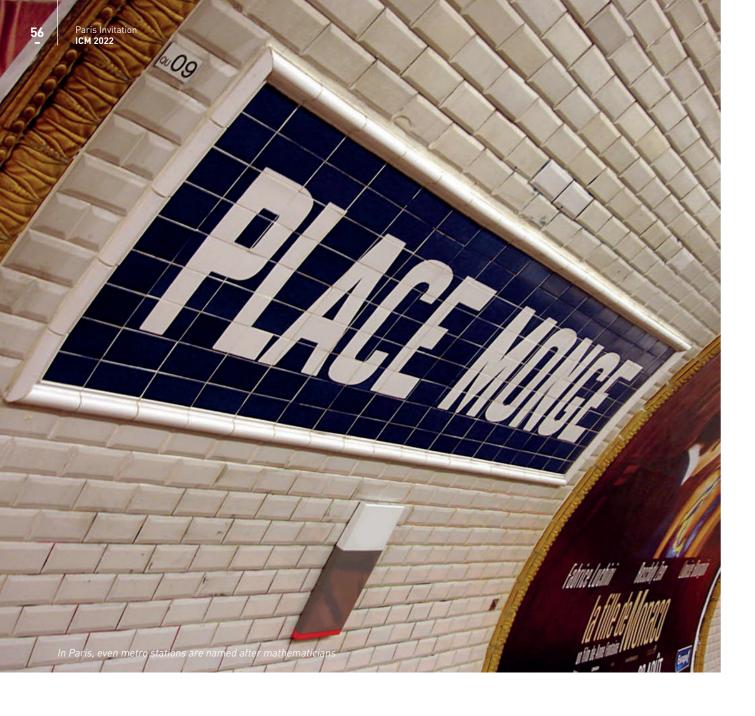
The Opening Ceremony will take place in a brand new building.





THE SPACIOUS PILLAR-FREE HALL CAN HOST **UP TO 7000 PARTICIPANTS.**

WE PROPOSE A LAY-OUT WITH CENTRAL STAGE AND SCREENS POSITIONED IN SEVERAL AREAS OF THE ROOM CEILING TO ALLOW EXCELLENT **VISIBILITY FROM ALL SEATS.**



VENUE ACCESS

Palais des Congrès de Paris can be accessed directly with metro line 1 and RER Line C. The station is within the building.





Ground transportation options to/from airports, train stations to/from venue city centre

FROM CDG AIRPORT

Estimated journey time:

40-45 min.

Public transport

(RER B + Subway)

Air France coach

FROM ORLY AIRPORT

Estimated journey time:

40-45 min.

Public transport

(Orlyval + Subway) Air France coach

FROM BEAUVAIS AIRPORT

(airport located 70 Km North of Paris - low costs carriers)

Estimated journey time:

1h00-1h30.

Beauvais shuttles

FROM GARE DU NORD & GARE DE L'EST (TRAIN STATIONS)

Estimated journey time: 30 min. Subway

FROM GARE DE LYON (TRAIN STATION)

Estimated journey time:

30 min. Subway

A transportation pass will be included in the congress registration fees.

AN EXCEPTIONAL RANGE OF HOTEL **ACCOMMODATIONS**

A city for every budget, Paris offers a large spectrum of prices and a wide range of accommodation options.

HOTELS FOR EVERY TASTE AND EVERY BUDGET

With over 100 000 bedrooms in nearly 1 600 hotels and with 20 000 bedrooms in "aparthotels" and student accommodation within the city, Paris boasts an abundant and eclectic range of hotel accommodation.



An ideal location

NEED A PLACE TO STAY IN PARIS? WANT GOOD VALUE FOR MONEY IN THE FRENCH CAPITAL?

More than ever, Paris is affordable: there are over 100 000 bedrooms in the French Capital and surroundings.

This is the biggest concentration of hotels in the world!

Whatever your budget, your accommodation needs and the experience you want, there are many options for you to choose from: 5 star deluxe hotels, student accommodation, boutique hotels, convention hotels, standard hotels... There is an incredibly wide range of options to suit everyone. Being in one of most beautiful cities in the world with the best value for money is one of the greatest advantages of coming to Paris. There are 3 000 bedrooms within two minutes' walk from the convention and another 4 000 that are a five minute walk away.

The following table shows a range of accommodation options in Paris:

Hotels	N° of rooms	Price range
5 stars	4 730	350-700€
4 stars	22 375	170-350€
3 stars	28 314	80-200€
2 stars	7 779	50-120€
1 star	1 492	30-80€

Youth Hostels & Hostels*	Establishments	Beds	Average capacity
Paris Youth Hostels	14	2 896	207
Paris Hostels	23	2 441	106
Inner Suburbs Youth Hostels	3	720	240
Total	40	6 057	

^{*}See following page





PARIS 2022 SOCIAL EVENTS (planned)

Besides its core programme, the Congress also promises an engaging social programme in Paris. The side events are a great way to get to know fellow international colleagues and discover some of the unusual spots of the City of Lights.







ICE-BREAKER COCKTAIL AT THE PALAIS DES CONGRÈS

Connect with old friends and soon-to-be new colleagues and kick off the Congress together! Following the Opening Ceremony, delegates, partners and exhibitors are invited to attend the reception in the exhibition area to celebrate the launch of the event and enjoy a very convivial moment.

WELCOME COCKTAIL HOSTED BY THE PARIS CITY HALL

The City hall has been the headquarters of the municipality of Paris since 1357. It stands on the magnificent place de l'Hôtel-de-Ville and features ceremonial rooms lavishly decorated in the 1880s style.

SOCIAL DINNER IN MONTMARTRE

On the occasion of ICM PARIS 2022, the entire Village of Montmartre will come to life exclusively for the congress participants! Montmartre is nowadays a district of Paris but it has kept its "village" identity along the years and world famous artists settled on the hill in the 20th century.

Restaurants, cafés, boutiques will welcome you and help you to discover Montmartre. Parisian-style entertainment will guide your steps all evening.

MUSICAL EVENING IN NOTRE DAME DE PARIS

The Concert will be a pleasant moment to enjoy music and to relax after the intense working days. It will take place in the Cathedral of Notre-Dame de Paris, a masterpiece of Gothic architecture, built in the Middle Ages, at the far end of the Île de la Cité. Its many visitors come to admire its stained glass and rose windows, the towers, the steeple and the gargoyles.

The reputation of Notre-Dame is due not only to its splendid architecture and rich history, but also to its musical tradition. Its extraordinary acoustics make the place ideally suited for a concert. It also boasts the finest organ of France.

MCI France a dedicated professional congress organizer (PCO)



congress in 2022.

MCI France is part of the MCI Group, the world leading PCO with 57 offices in 30 countries that will contribute to the promotion of the congress on a global scale.

MCI is specialized in the organization and management of congresses, conferences, seminars and similar

The Local Organizing Committee has MCI works as consultant for acadeselected the assistance of MCI France mic and professional associations and as the PCO for the organization of the provides full services management for conferences including but not limited to conference design, program development, registrations, site and venue selection and booking, audio-visuals, IT support, logistics, leisure management, marketing, printing and web services, fundraising, sponsorship and exhibitor sales, financial management and budget control.

> MCI France is already actively dedicated to the success of the congress.

The Paris Convention and Visitors Bureau, a key partner



The Paris Convention & Visitors Its mission is to promote Paris as bureau is a non-profit association Europe's leading destination for whose main sponsors, the Paris City congresses by offering expert ser-Council and the Chamber of Commerce and Industry, give their active support to the **promotion of the ca-** ners and association executives pital and its meetings industry.

vices and becoming the natural "one-stop-shop" for meeting planwho want to organize meetings, congresses or any kind of events in



Members of the Executive Committee

Institut Henri Poincaré 75005 PARIS

Dear Members,

VIPARIS and Le Palais des Congrès de Paris would be very honored to welcome the International Congress of Mathematicians 2022 in Paris.

The attractiveness of the city of Paris, its excellent accessibility, and the expertise of meetings industry professionals, are unique advantages that ensure the success of large international conferences held in our capital.

With an exceptional location in downtown Paris, the Palais des Congrès de Paris will offer the ideal space for the ICM 2022, with high-quality conference and exhibition space and many innovative features designed for the comfort of your delegates.

In a constant effort to improve the visitor's experience at our venues, we have introduced a number of specific services for event organisers: our new Smart Visit digital services pack, the Viparis Welcome Pack offering signage and free shuttles from the airport to the venues as well as the personalized city guide Like a Parisian.

On behalf of my team, I would like to express our motivation to host your event, and assure you that I will do everything in my power to make ICM 2022 in Paris a great success.



Vinaris • 2 place de la Porte Maillot • E-75853 Paris cedex 17 • Tel. +33 (f)



Chairman of the French national committee of

Institut Henri Poincaré

Dear Mr.Chairman

On behalf of the Paris Convention and Visitors Bureau, I wish to extend a warm invitation to you to hold the International Congress of Mathematicians – ICM in 2022 in Paris and I am pleased to offer my full support to our city's bid.

Paris offers a geographical situation which makes it an ideal platform to constantly develop economic exchanges. This strategic position at the centre of Europe makes it easily accessible by air, rail and

Paris also has a long experience in hosting international congresses and exhibitions. Its convention and exhibition centres offer large and adaptable premises and hi-tech communication equipment. Paris Region is undeniably one of the world's highest-ranked cities in terms of its hotel capacity and amenities, with more than 150,000 rooms. Parisian hotels are globally renowned for their top class services and their compliance with the highest standards of comfort

Paris is a destination with a dedicated network of professionals always attentive to delegate expectations, and providing the ingredients to make your event a record-breaking success. Indeed the Paris City Council, the Paris Chamber of Commerce and Industry, the Parisian key players and the Paris Convention and Visitors Bureau have put in place a global policy facilitating the organization of major events. This has led to the elaboration of 'the Charter for the Hosting of Professional Events',

Furthermore, alongside its image of Capital of Arts and Culture. Paris is a creative destination, in rpetual renewal, always on the move, a buzzing modern city with trendy bars and restaurants and

I am truly convinced that these assets are more than able to fulfil all the requirements of a world-class, high-value and demanding congress like the International Congress of Mathematicians.

I wish to welcome you whole-heartedly to Paris in 2022 and I can assure you that the Paris Convention Bureau will offer its best assistance in all aspects to make the International Congress of Mathematicians – ICM 2022, an unforgettable event.

Yours sincerely.



25, rue des Pyramides - 75001 Paris - Tél. : +33 (0)1 49 52 53 01 - Fax : +33 (0)1 49 52 42 84 - Email : president@parisinfo.com - PARISINFO.







May I help you?

A DEDICATED TEAM OF VOLUNTEERS FOR PARIS 2022

We know that the success of ICM Paris 2022 will depend on its hard-working volunteers. The Paris 2022 Organizing Committee can rely on a large number of volunteers, who will play a crucial role in supporting our commitment to the community and to ICM. All volunteers will perform a variety of tasks throughout the Congress.

AN ACCESSIBLE EVENT

The committee, together with the various service providers, is considering best practices and existing features at the Palais des Congrès and other venues. This will help ensure the best possible access and the best learning and networking conditions for people with disabilities.

FAMILIES AND ACCOMPANYING PERSONS: WELCOME!

In order to ensure families and accompanying persons that their visit to ICM PARIS 2022 will be as enjoyable as possible, the Organizing Committee will create an exciting and diverse Accompanying Persons Programme.

Partners will have the opportunity to make a difference – leaving a little bit of themselves behind by participating in the hands on CSR activities.

In addition the Organizing Committee will put in place the following initiatives during the Congress to make families and partners stay a most relaxing and pleasant one:

- Childcare service
- Concierge desk
- Partners lounge

PARIS CONGRESS, HEALTHY CONGRESS

Don't let your brain be the only body part you exercise at ICM PARIS 2022!

Mathematicians will stay healthy and fit during the Congress thanks to the several activities proposed by the Organizers:

- Early morning running sessions
- Mindfulness sessions
- Bike charging stations
- Organic and local food included in meals and breaks

Top 10 reasons to choose Paris

- Knowledge transfer.
- Public awareness.
- Attractiveness.
- Diversity & opportunity.
- Easy affordable access.
- Convenient downtown venue.
- Service-oriented.
- Immersion in arts and culture.
- Vibrant and inspired location.
- Sustainable congress.



A city with a rich mathematical heritage, Strasbourg is also the seat of several major European institutions and a lively historic city.



Enseignement supérieur, recherche et innovation

MONSIEUR SHIGEFUMI MORI PRESIDENT INTERNATIONAL MATHEMATICAL UNION MARKGRAFENSTR. 32 D-10117 BERLIN GERMANY

Strasbourg, le 15MARS 2016

Monsieur le Président,

La communauté mathématique strasbourgeoise, représentant en cela la communauté mathématique française tout entière, m'a fait part du projet d'organiser en France le Congrès international des mathématiciens en 2022, rassemblement international le plus prestigieux de la discipline, qui se tient tous les quatre ans et aura lieu à Rio de Janeiro

Comme précisé, cette manifestation se déroule en deux temps : l'Assemblée générale de l'Union mathématique internationale (IMU), puis le Congrès international (ICM) à proprement parler, les deux événements devant avoir lieu dans des villes distinctes.

J'ai l'honneur de vous confirmer que la ville et l'Eurométropole de Strasbourg seraient honorées d'accueillir, en binôme avec Paris, cet évènement d'ampleur, dont je sais combien il est attendu et reconnu dans le monde de la science et de la recherche mathématique internationale. Ce serait, par là même, la reconnaissance de l'excellence de la France dans ce domaine, d'autant que notre pays a déjà eu l'honneur de compter 12 lauréats de la médaille Fields, pour ne citer que cette distinction.

Cette proposition correspond parfaitement à la volonté de nos deux collectivités de développer une collaboration étroite et active avec leurs partenaires locaux, et particulièrement l'Université de Strasbourg, dont dépend l'Institut de recherche mathématique avancée (IRMA) et les professionnels de la recherche, au niveau national comme à l'international. Cela explique que, si Paris est l'une des rares villes françaises à pouvoir accueillir un rassemblement d'une telle envergure, Strasbourg, de par sa vocation de capitale européenne et son ouverture au monde scientifique, apporte une dimension complémentaire en termes d'image.

Plusieurs pistes pourraient être explorées pour mettre à la disposition des organisateurs du congrès des facilités et des infrastructures dédiées. Le large éventail de l'offre et la qualité de l'infrastructure strasbourgeois pourront vous être présentés au cours de l'examen plus approfondi de la candidature commune de Paris et Strasbourg.

Je me félicite donc de l'initiative de la communauté mathématique française en ce qui concerne l'organisation de l'ICM 2022 en France, et plus particulièrement du choix de Strasbourg comme site d'accueil de l'Assemblée générale de l'IMU.

Dans l'attente enthousiaste de la décision de votre organisation, veuillez agréer, Monsieur le Président, l'expression de mes sentiments les meilleurs.

> Nicolas MATT Vice-Président en charge de l'enseignement supérieur et de la

Strasbourg Eurometropolis Higher Education, Research and Innovation Vice President, Higher Education and Research

> Mr. Shigefumi Mori President International Mathematical

Union

Secretariat Markgrafenstr. 32. D-10117 Berlin, Germany

Strasbourg, 15 March 2016

Dear Mr. President,

The mathematics community in Strasbourg, on behalf of France's mathematics community as a whole, has told me about plans to organize the International Congress of Mathematicians – the discipline's most prestigious international gathering, which takes place every four years and will be hosted in Rio de Janeiro in 2018 – in France

As stated, this event takes place in two stages - the International Mathematical Union's General Assembly, then the International Congress of Mathematicians - and these two events are supposed to take place in different cities.

I am honored to confirm that Strasbourg City and Eurometropolis would see it as a privilege to team up with Paris to host this prominent event, as I know that the world of international mathematical research and science looks forward to it as an exciting highlight. At the same time, hosting this event would shed light on France's excellence in this field, and on the fact that our country is proud to count 12 Fields medalists as well as numerous mathematicians who have been rewarded with other

This proposal dovetails beautifully with our two cities' aims to develop close ties and cooperate actively with local partners, in particular including the University of Strasbourg, which oversees the Institut de Recherche Mathématique Avancée (IRMA) and is home to research professionals working on the national and international scenes. This is why, if Paris is one of the few French cities that can host such a largescale event, Strasbourg's position as a European capital in touch with the scientific world would add a complementary dimension and enhance the event's exposure.

We have several leads to explore and will provide Congress organizers with a variety of dedicated facilities and infrastructure. We will be happy to tell you about the wide range of options and the quality of Strasbourg's infrastructure in more detail during a more in-depth review of Paris' and Strasbourg's joint bid.

I am excited about the French mathematics community's initiative looking at ICM 2022 and about the prospect of holding it in France, and especially enthusiastic about his opportunity for Strasbourg to bid to host the IMU General Assembly.

I look forward to hearing about your organization's decision.

Yours sincerely,

Nicolas Matt

University of Strasbourg Alain Beretz President

> Mr. Shigefumi Mori President of the Executive International Mathematical Union

> > Strasbourg, 23 October 2015

Dear Mr. President,

I am writing in relation to France's and Paris' bid to organize the International Congress of Mathematicians, a respected and renowned highlight in international mathematical research, in 2022. On behalf of the University of Strasbourg, I would like to tell you that we are very keen on hosting the International Mathematical Union's General Assembly preceding it, and committed to providing the best conditions for your meeting.

The University of Strasbourg can look back on a legacy spanning almost five centuries and on numerous eminent scholars who have put it in the prominent position it enjoys today. This university willingly embraces its European and international vision. It caters to more than 46,000 students each year, and 20% of them are from outside France. It has 2,500 doctoral students and 4,600 teaching researchers and other staff, in its 37 academic and research units and 73 research units. This multidisciplinary university conducts world-class research and is in 83rd position on the Shanghai Ranking. Three working Nobel Prize winners - Jean-Marie Lehn (Chemistry, 1987), Jules Hoffmann (Physiology or Medicine, 2011) and Martin Karplus (Chemistry, 2013) - work side by side with many European Research Council (ERC) grant-holders and researchers commended by the Institut Universitaire de France (IUF), striving for excellence together. The University of Strasbourg has furthermore earned Initiative d'Excellence status on France's forward-looking investment program, and is home to 11 laboratories of excellence (LABEXes) including IRMIA, the Institut de Recherche en Mathématiques, Interactions et Applications.

This University's strategic vision is aimed at stepping "Beyond Frontiers". This means frontiers between disciplines, frontiers between research and training, frontiers that tend to separate the scientific world from the economic, professional and cultural worlds, and geographic frontiers, whichever they may be. This collective challenge is one that our entire community is rising to together.

The University's future is being shaped by its unique position in the Upper Rhine region. From a geographic perspective, this region is at the frontier between France, Germany and Switzerland. This region is in a strategic position at the center of Europe, and has achieved outstanding levels of performance in the fields of innovation, education and research on international scenes. Strasbourg is also home to leading French, European and international institutions, and a European cross-border campus, encompassing 5 universities, 160,000 students and 20,000 researchers and teaching researchers, is currently being created.

The University of Strasbourg is a member of the League of European Research Universities, which I have been honored to chair since 2013.

It is for all these reasons that the University of Strasbourg would be delighted and honored to host the International Mathematical Union's General Assembly in 2022, prior to the International Congress of Mathematics

Your contact at the University of Strasbourg will be Professor Yann Bugeaud, the Director of the Institut de Recherche Mathématique Avancée (IRMA). He and the Vice-President for Research will provide you with all the information and anything else you need to prepare this event and to ensure it unfurls flawlessly.

I hope that you choose to discuss our bid in more detail and look forward to hearing about your decision.

Yours sincerely,

Monsieur Shigefumi MORI

Président du comité exécutif de l'Union Mathématique

Strasbourg, le 23 octobre 2015

Réf · AB/CW/N° 2015-226

Affaire suivie par

UNIVERSITÉ DE STRASBOURG

Tél.: +33 (0)3 68 85 70 82 claudine.wernert@unistra.fr Monsieur le Président.

Me référant à la candidature de la France et de Paris pour l'organisation du Congrès International des Mathématiciens en 2022, événement prestigieux et renommé de la recherche internationale en mathématiques, je vous fais part, au nom de l'Université de Strasbourg, de notre fort souhait d'accueillir l'Assemblée Générale de l'Union Mathématique Internationale qui précède, et de notre engagement à recevoir cette

L'Université de Strasbourg avec près de cinq siècles d'histoire au cours de laquelle des noms illustres ont contribué à son rayonnement, affirme sa vocation européenne et internationale. Elle compte plus de 46 000 étudiants accueillis chaque année dont 20% d'étudiants étrangers et 2500 doctorants, 4 600 enseignants chercheurs et personnels, 37 unités de formations et recherches, 73 unités de recherche. Université pluridisciplinaire, elle porte des domaines de recherche de niveau international, et apparaît en 83^e position au classement de Shanghai. Trois Prix Nobel en activité (Jean-Marie Lehn, Prix Nobel de chimie en 1987 ; Jules Hoffmann, Prix Nobel de physiologie ou médecine en 2011; Martin Karplus, Prix Nobel de chimie en 2013), de nombreux lauréats du conseil européen de la recherche (ERC) et de l'Institut Universitaire de France (IUF) témoignent de son ambition à viser l'excellence. Lauréate de l'Initiative d'excellence du programme national des investissements d'avenir, l'Université de Strasbourg comporte notamment 11 laboratoires d'excellence (LABEX) dont l'IRMIA, Institut de Recherche en mathématiques, interactions et applications.

Son projet stratégique se fixe comme but de « dépasser les frontières »: celles qui séparent les disciplines, celles qui distinguent recherche et formation, celles qui tendent à séparer les sciences des mondes économique, professionnel et culturel, sans oublier les frontières géographiques, quelles gu'elles soient. Ce défi collectif est celui de toute notre communauté

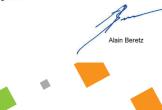
L'avenir de l'Université se dessine dans une dimension originale dans la Région du Rhin Supérieur, qui représente géographiquement la zone frontalière entre la France, l'Allemagne et la Suisse : cette région occupe une position stratégique au cœur de l'espace européen et possède un excellent niveau de performance reconnu sur le plan international dans les domaines de l'innovation, de l'enseignement et de la recherche. Elle jouit de la présence d'importantes institutions nationales, européennes et internationales. Un Campus Européen transfrontalier est en création, impliquant 5 universités. 160 000 étudiants et 20 000 chercheurs et enseignant-

En outre, l'Université de Strasbourg est membre de la Ligue des universités de recherche européennes, réseau que j'ai l'honneur de présider depuis 2013.

Pour toutes ces raisons, ce serait un grand plaisir et un grand honneur pour l'Université de Strasbourg d'accueillir l'Assemblée Générale de l'Union Mathématique Internationale en 2022, en amont du Congrès International des Mathématiciens.

Votre référent au sein de l'Université de Strasbourg sera le Professeur Yann Bugeaud, également actuel directeur de l'Institut de recherche mathématique avancée (IRMA) qui veillera, en lien avec la vice-présidence recherche, à vous communiquer tous éléments et toutes informations utiles à la programmation et au bon déroulement de l'évènement

En espérant que vous examinerez cette candidature avec intérêt et dans l'attente de votre décision, je vous prie de croire, Monsieur le Président, à l'expression de ma







Strasbourg

The city of Strasbourg has about 275000 inhabitants and the Greater Strasbourg (Eurométropole) about half a million. Its historic city centre, the Grande Île (Grand Island) was classified a World Heritage site by UNESCO in 1988. Strasbourg is located on the German border, about 500kms East of Paris but somehow close to it: the world's fastest train will take you from Paris to Strasbourg in less than two hours. Strasbourg is the seat of several European institutions, such as the Council of Europe (with its **European Court of Human** Rights) and the European Parliament.







THE VENUE

The brand new Strasbourg Convention Center is a perfect setting for hosting the General Assembly.

TRANSPORTATION

Quick and direct connections from Paris and Frankfurt airports. Transfer of the delegates from Strasbourg to Paris in special fast train (1h50).

BUDGET

The University of Strasbourg, the City, the «Euro-métropôle» and the Region «Grand-Est» have committed to finance the General Assembly costs. Special support to participants from developing countries is budgeted.







Congress budget estimate

Not only airfares and hotel accommodations are very good value for money in Paris, but also the convention center and other technical equipments are affordable. The proposed budget below lists the main expenses and revenue streams.

EXPENSES

VENUE:PALAIS DES CONGRÈS DE PARISDATES:9-17 AUGUST 2022ESTIMATED PARTICIPATION:BASED ON 5 000 DELEGATES *

1/ Congress facilities (meeting rooms, exhibition halls, offices, opening ceremony room included)	640 000,00 €
2/ Technical & A/V equipment and IT	290 000,00 €
3/ Communication (web, printed matters, promotion, translation)	182 000,00 €
4/ Local organization (poster, staff, management fees, signage, transportation)	736 000,00 €
5/ Contribution to summer schools & support to participants from developing countries	850 000,00 €
6/ Participants (delegate costs, badges, bags, coffee breaks)	176 000,00 €
7/ Social events (welcome cocktail, gala evening, invitees & hospitalities)	378 000,00 €
8/ Miscellaneous (legal audit, security, bank fees)	55 000,00 €
SUB-TOTAL	3 307 000,00 €

TOTAL EXPENSES	3 392 000,00 €
INSURANCE	21 000,00 €
CONTINGENCY	64 000,00 €
SUB-TUTAL	3 307 000,00 €

REVENUES

CONGRESS BUDGET BALANCE	36 500,00 €
SUB-TOTAL	3 428 500,00 €
CORPORATE REVENUES	1 358 000,00 €
INSTITUTIONAL REVENUES	800 000,00 €
REGISTRATION REVENUES**	1 270 500,00 €



^{**} Regular registration fee < 300 Euros

DEGICED ATION DEVENUES**





SUPPORT PARIS ICM 2022 BID ALSO ON



Address: Secretariat of ICM 2022 Bid
MCI France - 25, rue Anatole France - 92300 LEVALLOIS-PERRET - France
Telephone: + 33 (0)1 70 39 35 82 - Email: info@icm2022-paris.com

