

# Call for Applications

We seek good PhD or Master students who would like to take the opportunity to study at one of the several participating network institution listed below to develop research in the field of partial differential equations and its applications to industry and engineering.

Receiving such a grant would potentially widen research perspectives and personal experience, as well as contribute directly to the development of your dissertation.

**Deadline for Applications:** STILL OPEN

**Tentative start of exchange:** August 2002 (or thereafter until October 2005)

The focus of this European and Latin American cooperation program is to provide the exchange of Ph.D. and M.Sc. students between students in the *participating institutions* listed below in the field of Partial Differential Equations in Industry and Engineering. It is funded by the EU under the ALFA program. For more information on the ALFA network Partial Differential Equations in Industry and Engineering see <http://www.impa.br/~zubelli/ALFA>

Our network provides grants to students of the participating institutions who meet certain *specific criteria*. Such grants consist of reimbursement of 72% of the airfare (up to certain maximum limitations) as well as a monthly stipend for a period of one to three months. The stipend and the limitation on the airfare cost are listed below.

The grant holders will be required to develop a research or course-work program under the guidance of a faculty member in the host institution and will be asked to provide monthly progress reports. Any resulting publications should acknowledge the ALFA program in the standard way.

**Student Mobility:** The mobility of students envisaged by the ALFA program is defined as follows:

- from Latin-America to Europe
- from Europe to Latin-America
- within Latin-America

**Requirements for applicants:** Applicants have to fulfill several formal and technical requirements.

**Formal requirements:**

- Be a doctoral or master student in one of the participating institutions as verified by the student's historical academic record or a letter from the registrars office.

- Be a citizen of one of the participating EU or LA countries as verified by a passport or national identification card.
- Command the English language in case the local language of the host institution is not his/her native language. This could be verified, for example, by a TOEFL, ELTS, or local English exam in the candidate's institution

**Technical requirements** (to be confirmed by the student's academic adviser or local coordinator):

- Student in the field of mathematics, physics, chemistry, engineering, computer science, economics or related subjects.
- Be interested in the field of partial differential equations and its applications to industry and engineering.
- Provide a research/training program agreed up by the candidate's adviser, the student and the host institution professor who will supervise the student during the mobility period.
- Letter of intent by the candidate student and a curriculum vitae.

**The selection of the grant holders in this project will be based on the following criteria:**

1. Interest on applications of PDEs to industry and engineering.
2. Academic merit and potential
3. Involvement in research projects and collaboration with the other member institutions.

**Benefits:**

The grant holders will be reimbursed 72% of the value of their airfare up to the following maximum limits. Intercontinental trips EU\$1080, LA-LA trips EU\$576. The grant holder will receive a monthly stipend of EU\$540 for up to a total length of three months.

**How to apply and important dates:**

To apply for a grant under our ALFA network the candidate should send ALL the information to the local coordinator(s) (\*see list below\*). It is crucial that the student's academic adviser/supervisor be in agreement with such proposal.

The application process should start at least two months before the beginning of the mobility project. For further information the candidate should contact the local coordinator at his/her home institution or the ALFA home page.

**Some background information:**

ALFA (América Latina - Formación Académica) is a program of co-operation between higher education institutions of the European Union and Latin America.

Participant countries are the 15 Member States of the European Union and the following 18 countries of Latin America: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela.

The principal ALFA objectives are:

1. To encourage scientific, academic, and technological cooperation between Latin America and Europe in the field of higher education.
2. To promote cooperation programmes through networks of higher European and Latin American educational institutions in the realization of joint academic activities as well as in postgraduate and university student mobility. For more information on the ALFA program, see: <http://europa.eu.int/comm/europeaid/projects/alfa>

ALFA NETWORK: Partial Differential Equations in Industry and Engineering (PDEINET)

Our network is composed of a number of institutions in Europe and Latin-America with the firm commitment to research and education and represented by individuals who are interested in the application of partial differential equations to industry and engineering.

Our proposal focus on the idea that the training graduate students (doctoral and master) is best accomplished by the actual participation of the students in a research program developed by the host institution. In this way, we find it crucial that the candidate have a precise work-plan as well as a researcher who would be his/her mentor in the host institution. The participation of the student in the program should collaborate to strengthen existing collaborations as well as opening new research and educational avenues. The coordinators are Prof. Peter Markowich (University of Vienna, Austria) and Prof. Jorge P. Zubelli (IMPA, Brazil). More information can be found in the URL <http://www.impa.br/~zubelli/ALFA>.

<b>Network Member Institutions</b>
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From Latin-America : Name	Country
1 Universidad de Buenos Aires	Argentina
2 Universidade Estadual de Campinas	Brasil
3 Pontificia Universidade Católica do Rio de Janeiro	Brasil
4 IMPA - Instituto de Matematica Pura e Aplicada	Brasil
5 Universida de Chile	Chile

<b>6 Departamento de Matemática, Escuela Politécnica Nacional, Quito</b>	<b>Ecuador</b>
<b>7 Universidad de la Republica Oriental del Uruguay</b>	<b>Uruguay</b>
<b>8 Universidad de Holguin</b>	<b>Cuba</b>
From the European Union: <b>Name</b>	<b>Country</b>
<b>1 Universität des Saarlandes</b>	<b>Germany</b>
<b>2 L'Université Paris Dauphine</b>	<b>France</b>
<b>3 Dipartimento di Matematica, Università degli Studi di Pavia</b>	<b>Italy</b>
<b>4 Università degli Studi dell'Aquila</b>	<b>Italy</b>
<b>5 SISSA Trieste</b>	<b>Italy</b>
<b>6 Centro de Matemática e Aplicacoes Fundamentais/Universidade de Lisboa</b>	<b>Portugal</b>
<b>7 Institut für Mathematik/Universität Wien</b>	<b>Austria</b>
<b>8 Universidad Autónoma de Madrid</b>	<b>Spain</b>
<b>9 Departamento de Matemática Aplicada/Universidad de Granada</b>	<b>Spain</b>