



■ Welcome Note from CoLab@Portugal Mathematics Co-Director

The UT Austin | Portugal program in the area of Mathematics has already proven to have the potential for meeting the most optimistic goals. Since its early steps, the program based its activity in effective collaboration, between researchers of UT Austin and the Portuguese universities involved, in several areas of computational and applied mathematics. For this purpose, a number of Portuguese faculty members have spent extended periods of time in Austin working together with distinguished UT Austin faculty members.

As a result, joint papers have been written or are under preparation which not only is a relevant fact on its own, but it also contributed to make the Mathematics response to the 2008 call for research grants a successful one. In fact, all four grant applications have been funded and praised by the international panel (see the January 2009 issue of this newsletter). The teams formed in such research projects will certainly intensify and enlarge the current efforts.

Another successful aspect of the activity in the Mathematics section of the program has been the organization of interdisciplinary events. The most recent one was the Workshop on Mathematical Aspects of Imaging, Modeling and Visualization in Multiscale Biology, which took place at the ICES, UT Austin, from March 31 to April 4, 2009 (see the article in the current issue). A number of future events are being planned but, nonetheless, the direction of the program welcomes all interesting suggestions on future activities.

Luis Nunes Vicente

MARK YOUR CALENDARS:

- **SUMMER INSTITUTE'S LISBON COURSES APPLICATION DEADLINE** – May 15th – FCSH/UNL – Lisbon, Portugal – For more information on how to apply visit <http://www.utaustinportugal.org/Events.aspx?event=240>.
- **APPLICATIONS DEADLINE FOR YOUNG RESEARCHERS TO PARTICIPATE IN THE FCSH/UNL DIGITAL MEDIA PROJECT "DIGITAL INCLUSION AND INTEGRATION"** – May 15th – For more information on how to register and attend please visit the official site at www.utaustinportugal.org.
- **TACC SPRING SCHOOL IN ADVANCED COMPUTING REGISTRATION DEADLINE for both workshops:** May 21st – IST/UTL – Lisbon, Portugal – AND – May 27th – University of Porto – Porto, Portugal – For more information on how to register please visit their official websites, respectively at <http://taccspringschool.ist.utl.pt> and <http://taccspringschool.dcc.fc.up.pt>
- **COLAB ADVANCED SEMINAR ON MULTICORE PLATFORMS REGISTRATION DEADLINE** – June 1st – University of Minho – Braga, Portugal – For more information on how to register please visit the official website at <http://advcomp.di.uminho.pt/uta/multicore/>
- **SUMMER INSTITUTE'S PORTO COURSES APPLICATION DEADLINE** – May 30th – U. Porto – Porto, Portugal – For more information on how to apply visit <http://www.utaustinportugal.org/Events.aspx?event=240>.
- **FUTURE PLACES COMPETITION DEADLINE** – May 31st – For information on how to submit your work please visit <http://www.utaustinportugal.org/Events.aspx?event=230> or www.futureplaces.org.
- **12TH INTERNATIONAL CONFERENCE ON TECHNOLOGY POLICY AND INNOVATION** – July 13-14, 2009, Porto, Portugal – For more information www.ictpi09.org.pt

COLAB News Center

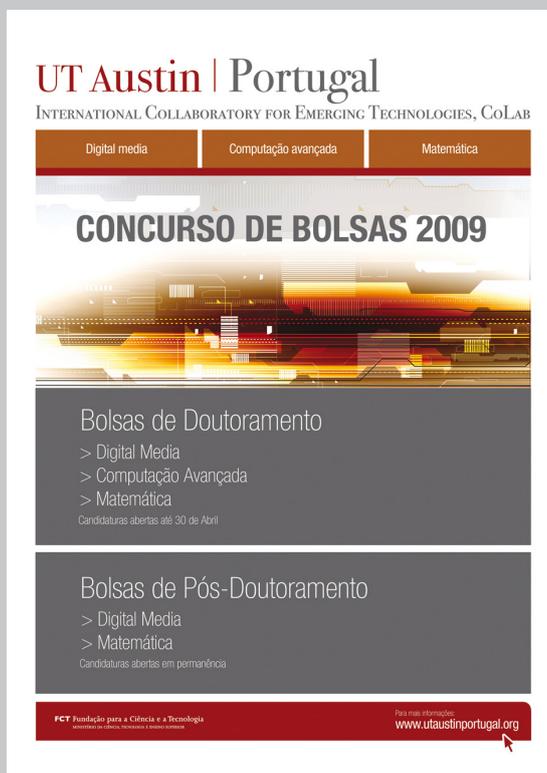
UT AUSTIN | PORTUGAL PROGRAM receives 57 PhD and Post Doc Scholarships Applications

The UT Austin | Portugal Program received 57 PhD and Post-Doc applications for the 2009 calls. The calls closed on April 30th and covered all academic areas of the program: Digital Media, Advanced Computing and Mathematics.

The Program accepted PhD and Post Doc applications in Digital Media and Mathematics and PhD applications in Advanced Computing. The Digital Media applicants were able to apply to the following subjects: *Audiovisual and Interactive Content Creation (including film and television, interactive music and sound design, participative media for education and culture), Journalism, Technologies, Industry, Public and Markets*. The Mathematics applicants applied to the following subjects: Algebra and

Number Theory; Analysis and Numerical Analysis; Analysis and Partial Differential Equations; Geometry and Topology; Optimization; Stochastic Processes and Mathematical Finance and Dynamical Systems. The Advanced Computing applicants were able to submit applications regarding in the following areas: Computer Science, namely in methodologies and techniques in High-performance-computing (HPC), distributed/grid computing and large-scale data analysis & management; Computational Engineering and/or Science with specific requirements in advanced computing.

The applications will now be evaluated by an international panel and the results will be announced to all candidates in a near future.



EVENT "International Partnerships" gathers small and medium national companies at FCT/UNL

The UT Austin | Portugal Program (CoLab), in collaboration with YDreams and IAPMEI, organized on May 11th the event "International Partnerships", which brought together the small and medium national companies affiliated with CoLab, MIT | Portugal and CMU | Portugal Programs. This event took place at the Library Auditorium at FCT/UNL, in Monte da Caparica.

This event is part of the European Week for small and medium companies, organized by the European Commission, and aimed to celebrate the connection between research and the small and medium companies affiliated with the Programs established by the Portuguese government. Both the Secretary of State for Science and Technology and Higher Education, Prof. Manuel Heitor, as well as the President of the Foundation for Science and Technology, Prof. João Sentieiro, was present at the event.



Fernando Santana, Manuel Heitor, António Rendas and António Câmara preside at the event.

■ UT Austin | Portugal Program participates at Artibytes 2009

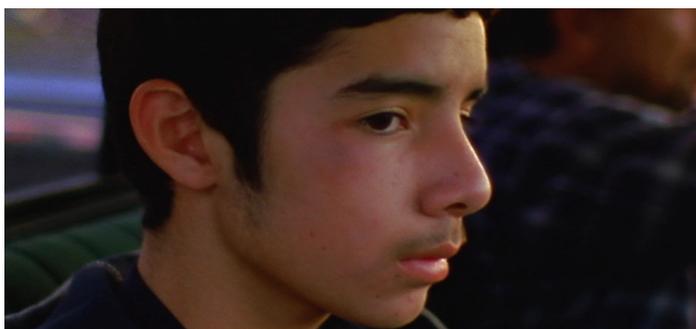
The UT Austin | Portugal Program was present at the 4th Artibytes, 2009 edition, which took place in Santarém, on April 27th and 28th. The Program's Executive Director, Pedro Madeira, was a member of a debate panel about "International Partnerships for Art and Technology".

The 2 day event started as a conference developed by faculty and students of the Escola Superior de Educação de Santarém and now gathers well known professionals both from Portugal and abroad. With several conferences and workshops, Artibytes aims to be a place for discussion, to share experiences about the technological development in different areas.



Pedro Madeira presents UT Austin | Portugal Program to Artibytes audience.

■ UT Austin Radio-Television and Film (RTF) students participate at Black & White Audiovisual Festival in Porto



Screen shots of Danzak and Kid, two of the movies screened in Portugal

This year's Black & White Audiovisual Festival, that took place in Porto from April 22nd to 25th, saw the participation of the films of several RTF UT Austin students. The films were part of the RTF department's SADDLE UP program.

The screening took place on April 22nd and the showed films such as: Danzak, by Gabriella Yepes, the story of a 10 year old girl, Nina, whose life dramatically changes when her dying father and Scissor Dancer master asks her to fulfill his last wish. Kid, by Miguel Alvarez, a coming-of-age ritual defines the relationship between a thirteen-year-old boy and his estranged father, Popsicle, by Lucas Amman, whose synopsis reads: "Spooky Molly would do anything to meet Jeffrey of Jeffrey's Spectacular Puppet Hour, but there's only one thing standing in her way to create the family of her dreams: her older sister".

Also screened were: Mr. Shoop, by Alan Lampert, a story about a world where self-expression is seen as a disease, and where Mister Shoop can't bear to go on. At long last, it seems as if the human race is coming to an abrupt end, and he has big plans and Martha, by Katja Straub, where Martha shows the view on life through the eyes of an 11-years old girl that struggles to accept her family (the most embarrassing family in the world, Martha is convinced).

■ SUMMER INSTITUTE 2009 in Porto and Lisbon – Apply now!

The second edition of the Summer Institute in Digital Media is now on the way, with the applications open for the Lisbon and Porto courses. Interested students may apply to the Lisbon courses until May 15th and to Porto's courses until May 30th.

The Lisbon courses will take place at FCSH/UNL (Av. Berna, 26) and will cover the subjects of: Convergent Hollywood (May 25th to June 5th), with Bryan Sebok, Online Journalism (May 25th to May 29th), with Rosental Alves, Screenwriting (May 25th to June 5th), led by Richard Lewis, Technology and Culture (June 8th to 19th), with Craig Watkins and Intro to Digital Documentary Production (June 8th to 19th), led by Nancy Schiesari.

Porto's courses happen at U.Porto (Praça Gomes Teixeira) and will focus on the following subjects: Online Journalism (June 1st to 5th), with Rosental Alves, Advanced Animation (June 15th to 30th), led by Geoff Marslett, Film Preservation and Historiography (June 15th to 26th), with Caroline Frick, Collaborative Documentary (June 15th to 26th), under the

supervision of Karen Kocher, Sound for Picture: Production and Post-Production (June 22nd to July 7th), with Andy Garrison, Screenwriting for the New Media (June 29th to July 10th), led by Stuart Kelban and Creating Music and Designing Interactive Music (July 6th to 17th), with Bruce Pennycook.

All interested students may apply to one or more courses by email to utaustinportugal@fct.mctes.pt. The application

must have the students' Résumé and a Motivation Letter to up to 350 words, as well as the person's basic info. The name of the course should be state in the email's subject (one email

per course). The courses will be 30€ each for the selected applicants.

For more information on the courses' schedules and professors' bios please visit

<http://www.utaustinportugal.org/Events.aspx?event=240> or <http://colab.ic2.utexas.edu/dm/courses/2009-summer-institute/>.

SUMMER INSTITUTE 2009
DIGITAL MEDIA

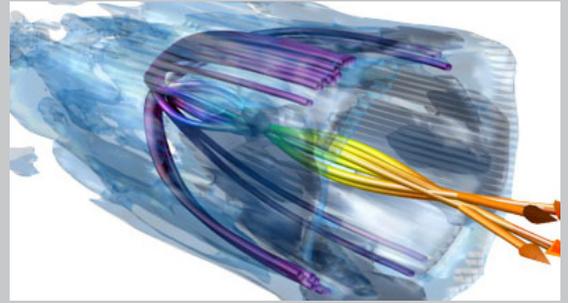
■ REGISTRATION OPEN for the TACC Spring School in Advanced Computing

The TACC Spring School in Advanced Computing, in two workshops that will take place at Instituto Superior Técnico (IST), in Lisbon, and the other at Universidade do Porto, in Porto have already opened their registration. The workshops will be oriented by TACC staff, including TACC's Director Jay Boisseau.

The workshop at the Centro de Congressos of IST, from May 25th to 27th aims to promote and trigger interaction with one of the leading High Performance Computing Centers in the World, as well as the first contact between Computer Science Engineering PhD students and TACC.

The workshop taking place at Universidade do Porto, on May 28th and 29th is organized as a hands-on workshop with the following goals: strengthen the collaboration among Portuguese research groups and TACC at UT Austin; training of researchers interested in using HPC resources; build expertise in advanced HPC programming and scientific visualization; experience in using a large scale HPC system.

Registration for the Lisbon workshop is open until May 21st at <http://taccspringschool.ist.utl.pt> and for Porto's workshop; the deadline is May 27th at <http://taccspringschool.dcc.fc.up.pt>. Visit both official websites for more information on the workshops' schedule as well as how to register.



■ COLAB Advanced Seminar on Multicore Platforms in Braga this June



The Advanced Computing program at CoLab is organizing a 3-day Advanced Seminar on Multicore Platforms, to take place in June 1-3, at University of Minho, in Braga.

The Seminar aims to provide insights into the current state-of-the-art in multicore platforms, by inviting speakers from leading scientific and industrial experts of the community. The topics addressed by the Advanced Seminar range from architectural and programmability issues to parallel scientific

computing.

The 3-day event will have talks on several topics, such as Intel Threading Building Blocks (by Alexey Kukanov, by Intel Corporation), parallel computing on GPUs (by Michael Garland, NVIDIA Research), the Unified Parallel C programming paradigm (by Montse Farrera, Universitat Politècnica de Catalunya), data parallel programming (by David Padua, University of Illinois at Urbana-Champaign), parallelism in irregular algorithms (by Keshav Pingali, University of Texas, Austin) and high performance dense linear algebra libraries (by Robert van de Geijn, University of Texas, Austin).

The target audiences are computer science or computational science/engineer researchers with experience in parallel programming. Registration is already open and free of charge until May 22 and seats are filling very fast (more than 40 participants have already registered during the first week). The seminar's official website is at <http://advcomp.di.uminho.pt/uta/multicore/>.

■ WORKSHOP on “Mathematical Aspects of Imaging, Modeling and Visualization in Multiscale Biology” gathers experts at UT Austin

The Workshop on “Mathematical Aspects of Imaging, Modeling and Visualization in Multiscale Biology” took place at the ICES (Institute for Computational Engineering and Sciences) of the University of Texas, at Austin, USA, from March 31st to April 4th, 2009.

This event featured talks involving cross-themes on mathematics, medical imaging, biomechanics, biology, and bioengineering, given by leading United States and Portuguese researchers. Selected contributed papers by PhD students and postdoctoral researchers were on display during poster sessions. The Workshop was attended by close to 60 participants, 25 from Portugal and 35 from USA. It had an interdisciplinary and broad audience, covering a wide range of areas, such as mathematics, computer and electrical engineering, mechanical engineering, biomedical engineering, computer sciences, molecular biochemistry, biology, and neurobiology.

Interactions and collaborative research, promoting the exchange of knowledge and new ideas, among the Portuguese and United States participants was notorious. In particular, several teams of the research grants recently funded by the UT Austin | Portugal program in the 2008 call on Mathematics and Advanced Computing participated in the workshop.

For more information, visit the workshop website at <http://www.ma.utexas.edu/colab>.

■ THE UTEN CORNER: S&T COMMERCIALISATION

UTEN Portugal University Technology Enterprise Network

UTEN@AUSTIN'S PROGRAM MANAGER, CLIFF ZINTGRAFF, DELIVERS TRAINING FOR TECHNOLOGY TRANSFER STAFF IN PORTUGAL

In March of 2009, UTEN@Austin Program Manager, Cliff Zintgraff was onsite in Portugal visiting with technology transfer staff from nine institutions, delivering training on RapidScreen and MarketLook methodologies combined with entrepreneurial training. 35 technologies were identified over the course of this visit to be screened and evaluated according to the UTEN@Austin technology commercialization processes. The UTEN@Austin team will be evaluating these technologies in four waves, the first of which is already underway with initial findings scheduled to be delivered on 5/17/2009. The next wave of evaluations will begin on 5/1/2009 with findings scheduled to be delivered on 6/1/2009. Second and third waves will begin in June 1st and July 1st respectively with findings to be delivered within 4 weeks from the start dates.

For the first time, the UTEN@Austin team will be conducting joint assessments with technology transfer staff in Portugal on technologies from Universidade de Aveiro, Tec-Minho with the Universidade do Minho and UPIN with the Universidade de Porto. Select technology transfer staff will work simultaneously with UTEN@Austin staff to evaluate technologies from their respective institutions. Institutions wishing to engage in joint assessments with their own institutions should contact Program Manager Cliff Zintgraff (czintgraff@ic2.utexas.edu). Institutions with assessments underway should contact Technology Assessment Team Lead Heath Naquin (hnaquin@ic2.utexas.edu) for questions concerning timelines, deliverables and new technology assessments.

■ MIT experts discuss technology transfer and commercialization in the second UTEN workshop



Under the theme "Experiencing Technology Transfer & Commercialization: Fostering a New Dialog with MIT", the second UTEN Workshop brought seven American experts from MIT – Massachusetts Institute of Technology to Portugal to discuss technology transfer and commercialization. The Workshop also contemplated the discussion of three successful cases of technology-based companies established at the University: Outsystems, Critical Materials and CEV. IST – Instituto Superior Técnico welcomed the second UTEN Workshop between 29 and 31 March, which gathered more than 70 participants, from technology transfer officers to entrepreneurs, researchers, college professors and technology-based entrepreneurs.

After the University of Texas at Austin collaborated with UTEN in the organization of Workshop UTEN#1, now is the time for the UTEN network members to learn from and debate with experts from MIT. With a strong educational and yet practical component that promotes the discussion of ideas, the second Workshop promoted by UTEN focused on technology transfer and commercialization from the University to the Industry. The workshop was divided into three parts: the first part was dedicated to the theme "Stimulating Knowledge Creation and Entrepreneurial Activities: Community, Research and Education", the second part to "Building and Supporting Entrepreneurial Activity and Academic Industry Collaboration", and the third part to "Reaping the Benefits of Knowledge Creation: Managing and Negotiating Research Sponsorship, IP Licensing, and Consultancy". During the sessions, the guests were invited to participate and provide their opinions.

Dan Roos, Tony Knopp, Charles Cooney, Lita Nelson, Ken Morse, Karl Koster and Jack Oldham were the seven American experts who came to Portugal to present MIT's practices in this area, together with other Portuguese experts, such as Teresa Mendes (Pedro Nunes Institute), José Carlos Caldeira (INESC Porto), Susana Barreiros (Universidade Nova de Lisboa – New University of Lisbon), António Cunha (University of Minho), Carlos Matos Ferreira (Instituto Superior Técnico) and Carlos Costa

(FEUP). Outsystems, represented by Paulo Rosado, CEV, represented by Sara Monteiro, and Critical Materials, represented by Gustavo Dias, were the three Portuguese successful cases of technology-based companies established at the University that were analyzed during the Workshop. The second Workshop promoted by UTEN was organized in collaboration with the MIT | Portugal program, the Instituto Superior Técnico, and with the Luso-American Foundation (FLAD).

In order to improve future workshops, UTEN administered an electronic survey to solicit feedback from participants and the feedback has been quite positive and encouraging. Over 90% of respondents felt positively about the opportunity to network with others. Respondents also were very positive about the presentation structure and discussants, about the ability to use the cases as a method to present information and to use the workshop information in their jobs. Respondents also believe that the workshop provided information that was new to them. Approximately 85% of the respondents thought the moderated discussion sessions were useful, while 67% felt that having discussions immediately after the presentations was useful in bridging the gap between Portugal and the US. Respondents believe that the amount of discussion time was reasonable.

All in all, participants left the workshop with a very positive impression and seemed to look forward to attending a more advanced training session on the same topics. Technology transfer, intellectual property and industrial liaison came up as the major topics of interest. The UTEN Workshop #3 is on the way. Under the theme "From the Laboratory to the Market Place: Obtaining Strong Patents for Technology Transfer and Commercialization" the Workshop will take place at the University of Minho, from 3 to 5 May 2009. This workshop is organized in collaboration with General Electric and the International Partnerships Program of the Foundation for Science and Technology (FCT). All the information regarding UTEN | Portugal Workshop #2 "Experiencing Technology Transfer & Commercialization: Fostering a New Dialog with MIT" has been posted at <http://utenportugal.org/>. Please go to <http://utenportugal.org/events/mit-workshop-2/> to find: Program, Participants list, Presentations and Handouts.

■ Results of the UTEN TT Internships Call

FCT launched in January 2009 a call for specialized internships in technology transfer, including on-the-job training for experienced individuals, preferably those based in technology transfer offices linked to institutions of science or higher education, incubators, science and technology parks and other entities engaging in activities relevant to Science and Technology.

Selected individuals will spend three to six months engaged in specialized internships aimed at evaluating the potential of commercialization and technology transfer projects in the pre-business and business phases and to facilitate their access to emerging markets.

The internships will be located in Austin, Texas, or other hosts within the international partners of UTEN (University Technology Enterprise Network).

Out of the 32 applications reviewed, 24 technology transfer professionals were selected from 11 organizations across Portugal including two state agencies.

The first phase of the internships in Austin, Texas will start in mid May with two primary goals:

- 1) Orientation to the University of Texas ecosystem, culture, and Internship Training Program with detailed planning sessions to identify key learning opportunities/hosts for each trainee and to align internship activities/deliverables with the on-going strategic plans of each TTO office.
- 2) Delivery of formal training to include the first half of the UTEN Austin 2009 Technology Commercialization Curriculum with a certificate to be awarded upon completion.

The May training curriculum will address the following subjects:

1. Licensing, negotiations, and closing the deal
2. Formation, launch, and growth of university spin-outs
3. Technology development and licensing to meet the needs of industry
4. Running a TTO to optimize technology commercialization
5. Marketing skills for TTO's
6. Entrepreneurial skills for TTO's
7. Technology screening and market validation methodologies for TTO's

For more information on the UTEN Internship Training Program please contact Ana Paula Amorim UTEN | Portugal Liaison Officer (anamorim@utenportugal.org).

■ ONGOING OPPORTUNITIES

Digital Media:

INTERNSHIP OPPORTUNITIES IN AUSTIN COMPANIES

We have recently updated our internship program and encourage graduate students and early-career professionals interested in gaining hands-on experience working at Austin-based companies to apply. The program includes airfare to Austin, housing for up to 3 months, health insurance, and visa fees. We also list interns as "visiting researchers" at the University of Texas, which grants them access to the university library system, gyms, and other campus amenities as well as the city bus system. Those interested in applying can find more information about the program, including application procedures at <http://colab.ic2.utexas.edu/dm/internships/>.

Applications may be submitted at any time, but the minimum time for processing and placement is 4 months, so those interested must plan ahead.

Internships will last a minimum of 6 weeks, and interns will be placed at digital media companies in Austin. During their time in Austin, interns will not only have the opportunity to learn about the digital media industry through their internship assignment, but will also be able to participate in professionalization and leadership training with University of Texas students enrolled in the Digital Media Leadership Program.

FUTURE PLACES 2009 – CALL FOR ENTRIES

The FUTURE PLACES Festival is an international competition celebrating digital media work. FUTURE PLACES explores the potential of Digital Media when applied to specific cultural and social environments.

The festival features exhibitions, conferences, workshops, concerts, performances and parties. We are interested in creative and new languages for interactive and media expression, and their impact on local cultures, society and public space.

For 2009's edition, the competition will give a first prize award of 3000€ and a second prize award of 1000€.

FUTURE PLACES recognizes the authors of the best works presented at the festival with two cash prizes, and the opportunity to participate in a three-month residential program at the University of Porto and/or at the University of Texas at Austin. The winner will be offered airfare and three months' lodging at the residency site.

The deadline for submissions is May 31st. For more information on the festival or the competition please visit FUTURE PLACES official website at www.futureplaces.org or contact the organizing committee personnel: Karen Gustafson (futureplaces.kgustafson@gmail.com) or Fátima São Simão (fssimaofp09@gmail.com).

Mathematics:

SUMMER SCHOOL AND WORKSHOP ON "KINETICS AND STATISTICAL METHODS FOR COMPLEX PARTICLE SYSTEMS"

This is a two-week summer program to be held this coming July 2009 in Lisbon, Portugal. The week of July 13 to 17 will feature a summer school for graduate students and post-docs, with 5 mini course series by E. Carlen, P. Degond, I. M. Gamba, M. Katsoulakis and R. Pego. The following week of July 20 to 24 will hold a workshop featuring lectures on recent progress in this field.

This program is a University of Texas at Austin-Universities in Portugal initiative <http://www.math.ist.utl.pt/~dgomes/austin> and is also supported by the ICTI Carnegie Mellon University | Portugal partnership, CIM and CMAF.

How to Apply:

We invite graduate students and post-docs to register and apply for funding for the first and second week of the program. Updated information about the school and workshop program can be found at: <http://kinetic.ptmat.fc.ul.pt>

Useful links

www.utaustinportugal.org

www.fct.mctes.pt

www.utexas.edu

www.ic2.org

www.ati.utexas.edu

www.austin-chamber.org

<http://colab.ic2.utexas.edu/dm/>

www.utenportugal.org

We want to hear from you! Want to share your doubts and concerns about something you read? Want to see other topics featured in next month's newsletter? Want to contribute with articles or art? Please send all your feedback to sofia.santos@fct.mctes.pt.