President's Message

This Newsletter is being distributed to all EUSIPCO-2002 conference registrants so, if you have not come across EURASIP before, we welcome you. All conference registrants will become EURASIP members for an 18 month period and you will thus now receive these newsletters for the next year and a half.

This newsletter contains all the details of those individuals who have received best paper awards. These awards will be presented at the EUSIPCO-2002 banquet along with the EURASIP achievement awards outlined in the previous newsletter. Before this, on the Wednesday evening, we have the General Assembly for EURASIP, our biannual meeting, and all our members are welcome to attend and participate in this meeting, including voting for the new ADCOM members.

I look forward to welcoming you all at EUSIPCO in Toulouse during the first week in September.

P. M. Grant
President EURASIP

EURASIP Achievement Awards

EURASIP Meritorious Service Award

The **EURASIP Meritorious Service Award for 2002** is awarded to Leonardo Chiariglione for his fundamental activities in audio and video standardization and the foundation of the EURASIP journal Image Communication.



Leonardo Chiariglione received an entirely classical and humanistic education until he moved to the studies of electronics and communications at the Polytechnic of Turin (Italy), where he graduated in Electronic Engineering. Then, he obtained his PhD degree from the University of Tokyo in 1973. Since 1971 he has been with CSELT, the corporate research center of the Telecom Italia group, where he is now Vice President, Multimedia. Leonardo always excelled in creating collaborative initiatives favouring, in this way, partnerships and friendships. In this respect, it is not a case that his hobby is learning foreign languages and practicing them with his worldwide circle of acquaintances. In fact, he has led several European collaborative projects and in 1986 originated the HDTV Workshop, an international event targeted at promoting the technical aspects of HDTV overcoming the traditional barriers of specific industry interests. In 1988 he originated the ISO activity in video standardization by creating the Moving Picture Experts Group of which he is the Convenor and, in fact, he is universally known as the "Father of MPEG". More recently he launched the ideas of other collaborative initiatives, such as the Digital Audio-Visual Council (DAVIC), the Foundation for Intelligent Physical Agents (FIPA) and the Open Platform Initiative for Multimedia Access (OPIMA). He founded in 1989 the EURASIP journal Image Communications, devoted to the development of the theory and practice of image communication. He served as the Editor-in-Chief of this renowned international journal until June 1999 when he became the Honoray Editor.

With all these initiatives, Leonardo actively contributed to the growth and the promotion of the name of our association all around the world, promoting and enhancing in this way the value of the EURASIP membership. Therefore, the EURASIP AdCom wishes to honour Leonardo Chiariglione for his merits and services with the medal for Meritorious Service Award 2002.

Annual European Group Technical Achievement Awards

The **European Group Technical Achievement Award for the year 2001** is awarded to Yrjo Neuvo for his group's fundamental contributions in digital filters, median filter designs and also in FIR and IIR filtering algorithms. In particular the strong pull through into commercial applications is a most significant achievement.



Yrjo Neuvo is Executive Vice President, Chief Technical Officer at Nokia Mobile Phones and previously was Professor of Electrical Engineering at the Tampere University of Technology. During the period 1974-1993 he created the strong DSP community in Finland focused around Tampere University of Technology. Today Nokia's DSP Research is located in Tampere with 200 researchers. Dr Neuvo has co-authored more than 400 papers, several patents and organised more than 30 continuing education courses. Creation of links between academia and industry has been one of Dr Neuvo's important activities. He has been a member of the European Union's Committee for Development of Science and Technology and the European Science and Technology Assembly. Dr Neuvo is now responsible for Nokia cellular phone developments and, as a member of Nokia Executive Board, has contributed significantly to Nokia strategic planning.

The **European Group Technical Achievement Award for the year 2002** is awarded to Murat Kunt for his Lausanne Signal Processing Laboratories (LTS) pioneering research in DSP and in particular innovative contribution to signal, image and image sequence analysis, processing and coding. Under his leadership, the LTS has reached an outstanding level in its current five main areas of research (digital TV, image analysis and computer vision, 1-D signal processing, future multimedia PCs, and speech processing). In image and video coding, in the mid 80's, they proposed the so-called Second Generation Coding Techniques: a new coding paradigm in which, nowadays, there is still active research.

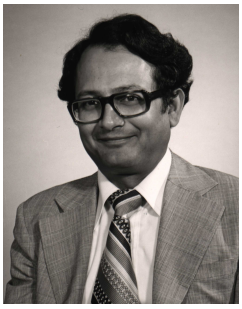


Murat Kunt is Director of the LTS and Professor of Electrical Engineering at the Swiss Federal Institute of Technology (EPFL). Prof Kunt has been, since its creation, the Editor-in-Chief of the Signal Processing Journal and a founding member of EURASIP. He was the co-chairman of the first European Signal Processing Conference (Lausanne EUSIPCO 1980) and the general chairman of the third International Image Processing Conference (Lausanne 1996). Murat was the President of the Swiss Association for Pattern Recognition from its creation till 1997. He received the gold medal of EURASIP for meritorious services (1983) and the IEEE ASSP technical achievement award (1997).

The LTS has an average output per year of 8 PhDs, 100 publications, and 2 patents. The LTS has become a reference research group worldwide, being the initiator and driver of a large number of European projects under various Programmes (such as Esprit, Eureka, RACE, HCM, Commet, COST, IST) and an active partner in standardization efforts (such as H-263, MPEG-4, JPEG-2000, MPEG-7). Last, but not least, all these achievements would not have been possible without the special care that Prof Kunt has taken on selecting and educating the successive generations of researchers who, from all parts over the world, have formed the LTS.

Annual Individual Technical Achievement Awards

The **first Individual Technical Achievement Award for 2002** is made to Sanjit K. Mitra for outstanding contributions in analogue and digital signal and image processing, with immediate applications in communications, control, multirate filtering and transformation and nonlinear video coding.



Following his appointment as assistant professor at Cornell University and working at AT&T Bell Laboratories, Holmdel, he initially joined the faculty of the University of California at Davis before moving to Santa Barbara. **Prof Mitra** has published more than 500 papers and 12 books, and he holds 5 patents. He served as President of the IEEE Circuits and Systems Society in 1986 and is currently a member of the editorial boards for five journals. Sanjit has received many distinguished industry and academic awards, including the 1973 F E Terman Award and the 1985 AT&T Foundation Award of the American Society of Engineering Education, the 1989 Education Award and the 1999 Mac Van Valkenburg Society Award of the IEEE Circuits and Systems Society, the Blumlein-Browne-Willans Premium of the Institution of Electrical Engineers (U.K.) in 2000, and the 1996 Technical Achievement Award and the 2001 Society Award of the IEEE Signal Processing Society. Prof Mitra has strong research cooperations with many European researchers, undertaking frequent visits and through his many publications in European journals. These have been acknowledged by the previous European awards: 1989 Distinguished Senior US Scientist Award from the Alexander von Humboldt Foundation of Germany; Honorary Doctorate of Technology given by the Tampere University of Technology in Finland; and the recent appointment as an Academician of the Academy of Finland.

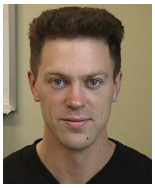
The **second Individual Technical Achievement Award for 2002** is awarded to Petre Stoica for his contributions to system identification, spectral analysis, and statistical signal processing. Among his many early contributions is the optimal instrumental variable approach to system identification. He is also credited widely with a large number of fundamental results including statistical analyses and performance bounds as well as novel optimal methods for array processing and spectral analysis.



Petre Stoica is Professor of System Modelling in the Department of Systems and Control at Uppsala University in Sweden. He published 7 books, 11 book chapters and some 500 papers in journals and conference records. Petre received a number of awards including a 1989 IEEE ASSP Society Senior Award, the 1996 Technical Achievement Award of the IEEE Signal Processing Society, a 1998 EURASIP Best Paper Award for Signal Processing, a 1999 IEEE Signal Processing Society Best Paper Award, an IEEE Third Millennium Medal as well as the 2000 IEEE W R G Baker Paper Prize Award. He is on the Editorial Boards of five journals and a member-at-large of the Board of Governors of the IEEE Signal Processing Society. From 1981 to 1986 he was Director of the International Time Series Analysis and Forecasting Society. He is an Honorary Member of the Romanian Academy, a Fellow of the Royal Statistical Society, and a Fellow of the IEEE.

EURASIP (Journal) Best Paper Awards

Signal Processing (2000)



"Meaningful MRA initialization for discrete time series", Vol. 80, n. 9, September 2000, pp. 1971-1983.

D.N. Veitch, M.S. Taqqu and P. Abry





This paper shows how the wavelet transform of discrete processes can be handled using the continuous time analog. It is well written and easy to read. The discrete time process is interpolated by a continous time time process having a bandlimited power spectral density that coincides with the power spectral density of the discrete process. Details and examples are given so that the method can be conveniently used in practice.

Signal Processing (2001)



"Quantization effects on digital watermarks", Vol 81, no 2, February 2001, pp. 239-263.

J.J. Eggers and B. Girod



This paper analyses quantization effects on watermarking. It is clearly written and presents both theoretical and experimental results. The merits of this paper that have been particularly appreciated by the members of the evaluation sub-committee are based on the fact that the Authors take a real-world problem, analyse it in a sensible manner, making use of work from related areas (dither-quantization), with the result that they produce a workable algorithm whose theory they understand and which they demonstrate with results.

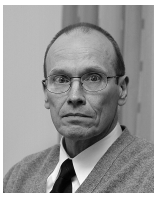
Members of the SP award sub-committee:
Olivier Besson
Nicholas Kalouptsidis
Steve Mc Laughlin

Image Communication



"Image compression using multiple transforms", Vol. 15, n. 6, March 2000 pp. 513-529.

M. Helsingius, P. Kuosmanen and J. Astola



This paper represents a very good example of the benefits derived by synergic applications of image processing and pattern recognition in a field such as image coding that needs interdisciplinarity to produce new challenges. The paper has been preferred to competing ones for his generality and for the consequent long term attractiveness as well as for its higher possibilities to be used in the future as a reference, in particular in the field of high performance adaptive image coding.

Members of the IC award sub-committee:
Mohammed Ghanbari
Pauli Kuosmanen (*)
Carlo Regazzoni

(*) Pauli Kuosmanen did not take part in the evaluation of the awarded paper.

Speech Communication



"Hidden Markov modeling using Toeplitz covariance matrices", Vol. 31, (2000), pp. 1-14.

W. Roberts and Y. Ephraim



The reduction of additive disturbances in speech signals is a well-known problem with many well-known approaches. Methods developed for speech transmission purposes may not be optimal for automatic-recognition tasks. The awarded paper proposes to apply Toeplitz-structured covariance matrices in HMM-based recognisers with good adaptation abilities to additive noise. The new technique is both detailed in theory and verified in simulations, showing that its performance is equivalent to that of classical AR and cepstral approaches without noise, but enhanced under noise influence. From its technical content as well as from its presentation, this contribution was clearly the selection committee's favourite choice.

Members of the SC award sub-committee:
Ulrich Heute (coordinator)
Hynek Hermansky
Bastiaan Kleijn

2002 AdCom Elections

Bios and Photos of the Candidates



Helmut Bölcskei has been Assistant Professor of Communication Theory at the Swiss Federal Institute of Technology (ETH) Zurich, Switzerland since February 1, 2002. He was born in Austria on May 29, 1970. He received the Dipl.-Ing. and Dr. techn. degrees in electrical engineering/communications from Vienna University of Technology, Vienna, Austria, in 1994 and 1997, respectively. From 1994 to 2001 he was with the Institute of Communications and Radio-Frequency Engineering, Vienna University of Technology. From March 2001 to January 2002, he was an Assistant Professor of Electrical Engineering at the University of Illinois at Urbana-Champaign. He was a visiting researcher at Philips Research Laboratories Eindhoven, The Netherlands, ENST Paris, France, and the Heinrich Hertz Institute Berlin, Germany. From February 1999 to February 2001 he was a postdoctoral researcher with Prof. A. Paulraj in the Smart Antennas Research Group in the Information Systems Laboratory, Department of Electrical Engineering, Stanford University, Stanford, CA. From 1999-2001 he was a consultant for Iospan Wireless Inc. (formerly Gigabit Wireless Inc.).

At ETH he is the head of the communication theory group in the Communication Technology Laboratory, Department of Information Technology and Electrical Engineering. His research interests include communication and information theory and statistical signal processing with special emphasis on wireless communications, multi-input multi-output (MIMO) antenna systems, space-time coding, coding for fading channels, Orthogonal Frequency Division Multiplexing (OFDM), wireless networking, and parameter estimation problems in the context of wireless communications.

Helmut Bölcskei received a 2001 IEEE Signal Processing Society Young Author Best Paper Award and was an Erwin Schrödinger Fellow (1999-2001) of the Austrian National Science Foundation (FWF). He serves as an associate editor for the IEEE Transactions on Wireless Communications and the IEEE Transactions on Signal Processing.



Prof. **F. Castanié** was born in 1947. He got his Ph. D and its Doctorate of Sciences degree from National Polytechnics Institute of Toulouse (INPT) respectively in 1971 and 1977. He joined the Engineering school ENSEEIHT in 1970 as a research assistant, and becomes a Lecturer, then a Professor resp. in 1974 and 1980. He is presently a professor in the same institution.

He teaches essentially Signal Processing at the undergraduate and graduate level. He gives several doctoral courses in the following topics : Time-Frequency and Wavelet Analysis, Parametric Signal and Time Series Modeling, Digital Signal Processing.

He is responsible for a Doctoral Studies Center in Signal, Images and Acoustics, with gathers 4 Higher Education Institutions (one University and 3 Engineering Schools) in the Toulouse area.

With respect to his research involvement,he has been a Director of Electronics Laboratory of ENSEEIHT (LEN7) from 1983 to 1996.

He then devoted his efforts to create, with others, a Cooperative Laboratory in Telecommunications for Space and Aeronautics**,** involving 9 laboratories, 2 major industries and 2 institutions in this domain. Prof. Castanie is now the Head of this Laboratory (**TeSA**) which started his activity in 1999.

From the beginning of his career, he has been involved in Signal Processing, mainly in Digital Signal Processing and Parametric Signal Modeling, with a particular attention to Automatic Recognition. His research interests have moved to Wavelet decomposition with application to change detection in Stochastic Processes, and to Neural Network processing, with a special emphasis on time series and signal modeling. A today's major application domain of his activity in this latter theme is the Satellite Mobile Communication Domain, with a special involvement in Identification and Equalization of Non Linear and Time Varying Communication Channels. For his activity in Mobile Communications, Prof. F. Castanie has been a coordinator in European Research project (ACTS program) and 5th PCRD IST program ; he has served as an Expert of the EEC in various programs.

He is presently Chairman of the French Chapter of Signal Processing of the IEEE.

Prof. Castanié is the Chairman of the following Conferences, both to be held in Toulouse (France) :

- GRETSI 2001, the French Conference on Image and Signal Processing
- EUSIPCO 2002, the European Conference on Image and Signal Processing

He authored or co-authored more than 40 papers and 160 communications in international conferences. He has 7 international patents, and has co-authored around 90 industrial contracts reports**.** During his 30 years of career, he has been the advisor of more than 50 Ph. D**.**.



Jonathon A. Chambers was born in Peterborough, United Kingdom in March 1960. He served in the Royal Navy as an Electronics Artificer Apprentice between 1978 and 1982. His undergraduate education was at the Polytechnic of Central London where he attained a first-class honours degree in Electrical & Electronic Engineering and was awarded the Robert Mitchell Medal as the top graduate of the Polytechnic in 1985. He held a Lectureship position at the Polytechnic of Central London before studying for his PhD at Peterhouse College, Cambridge University and Imperial College, London. His PhD, in the area of adaptive signal processing, was awarded in 1990.

He held a postdoctoral research associate position at Imperial College London before moving to Schlumberger Cambridge Research, Cambridge, U.K., in 1992, where he applied digital signal processing techniques to the interpretation of oilfield measurements, particularly in fluid mechanics. In 1994 he returned to Imperial College as a Lecturer in Signal Processing and was promoted to a Readership in 1997. In February 2002 he was appointed as the Professor of Digital Signal Processing at King's College London where he leads the Centre for Digital Signal Processing Research. His research interests are in the area of adaptive, blind and statistical signal processing with applications to telecommunications and intelligent sensors.

He has served as an Associate Editor for IEEE Trans. Signal Processing and IEEE Trans. Circuits & Systems II: Analog and Digital Signal Processing. He has authored and co-authored more than 150 research publications and supervised 15 PhD graduates. He is the co-author of the research monograph Recurrent Neural Networks for Prediction: Learning Algorithms, Architectures and Stability, Wiley 2002. He has served as the chairman of the UK IEE Professional Group on Signal Processing and several conference committees.



Ferran Marqués received a degree on Electrical Engineering from the Polytechnic University of Catalonia (UPC), Barcelona, Spain, in 1988. From 1989 to June 1990, he worked in the Swiss Federal Institute of Technology in Lausanne (EPFL) in the group of "Digital image sequence processing and coding". In June 1990, he joined the Department of Signal Theory and Communications of the Polytechnic University of Catalunya (UPC). In 1991, he was with the Signal and Image Processing Institute at USC in Los Angeles (California). He received the Ph.D. Degree from the UPC in December 1992 and the Spanish Best Ph.D. Thesis on Electrical Engineering Award-1992. Since 1995, he is Associate Professor at UPC, having served as Associate Dean for International Relations of the Telecommunication School (ETSETB) at UPC (1997-2000). He is lecturing on the area of digital signal and image processing.

He has served as Officer responsible for the Membership Development (1994-1998) for the EURASIP AdCom, as elected member responsible of the Member Services (1998-2000) and currently he is serving as Secretary and Treasurer. He was Associate Editor of the Journal of Electronic Imaging (SPIE) in the area of Image Communications (1996-2000) and currently he serves in the Editorial Board of the Eurasip Journal on Applied Signal Processing. He has edited (as guest editor) special issues of Signal Processing: Image Communication on Augmented Virtual Environments and 3D Imaging and of the Journal of Applied Signal Processing on Signal Processing for 3D Imaging and Virtual Reality. He is author or co-author of more than 60 publications that have appeared as journal papers and proceeding articles, 4 book chapters and 4 international patents.



Dr Bob Stewart is currently faculty in the Department of Electronic and Electrical Engineering at the University of Strathclyde, UK. Prior to joining University of Strathclyde, Dr Stewart was a visiting Professor in Department of Electrical Engineering at the University of Minnesota in 1990, and a visiting scholar at the University of Southern California in 1986/7. Since 1997 he has been a part-time Visiting Professor at the University of California, Los Angeles Extension School where he teached on Digital Signal Processing. In 1999 Bob worked on a Royal Academy of Engineering Industrial Secondment scheme.

Bob Stewart's general research interests are in the areas of adaptive signal processing and digital commuications, particularly 3G DSP strategies. Current research projects in Dr Stewart's research group include work on adaptive channel equalisation, adaptive receiver techniques for multiuser communications (CDMA), oversampling strategies for sigma delta ASICs, subband strategies for acoustic echo control, multimedia integration of DSP educational tools and LPC strategies for speech coding. Dr Stewart's current work is funded by a number of companies and agencies including, the Engineering and Physical Sciences Research Council, and Motorola. Dr Stewart has consulted on digital signal processing to companies including British Telecom, Motorola, Ericsson, GEC-Plessey Telecommunications, Lucent, Marconi Instruments, Racal, the BBC, Robert Bosch, and a number of DSP technology start-up companies. Bob Stewart is also the presenter of the European DSP Foundation Course which, since their inception in 1994, have been presented to more than 900 attendees in Europe and the USA.

Over the last 10 years Dr Stewart has published more than 150 technical papers, one textbook and is the author and designer of the DSPedia CDROM, and of the CompanionCD for the textbook Digital Communications by Bernard Sklar (Prentice Hall, 2001). Dr Stewart is a Chartered Engineer, and a member of the IEEE, the IEE, the Audio Engineering Society, and the British Society for Audiology.

Since 1998, Bob has been the Web Officer to the EURASIP AdCom committee.



Sergios Theodoridis received an honours degree in Physics from the University of Athens and his MSc and PhD degrees from the Department of Electronics and Electrical Engineering of Birmingham University, U.K. He is currently Professor of Signal Processing and Communications in the Department of Informatics and Telecommunications of Athens University. His Research interests lie in the areas of Adaptive Algorithms, Channel Equalization, Pattern Recognition, Signal Processing for Music and OCR systems. He has published more than 100 papers in prestigious International journals and refereed Conferences. He is the co-editor of the book "Efficient Algorithms for Signal Processing and System Identification", Prentice Hall 1993, the co-author of the book "Pattern Recognition", Academic Press 1998, which has been among the besting selling titles of Academic Press, and three books in Greek, two of them for the Greek Open University.

He was the organizing committee chairman for the PARLE-94 Conference and the general chairman for EUSIPCO-98 and he has served in the past as an Associate Editor for the IEEE Transactions on Signal Processing. He is currently in the Editorial Boards of the Signal Processing and Applied Signal Processing EURASIP journals and an Associate editor for the IEEE Transactions on Signal Processing for the period 2002-2005. He was the Guest Editor for the special issue on Adaptive Algorithms and Echo Cancellation for the IEEE Signal Processing Magazine, and he has been an invited speaker in a number of conferences. He is a member of the ADCOM of the European Association for Signal and Image Processing (EURASIP) and he is a Fellow of the IEE.

Besides his Academic activities, he has hold a number of industry related posts. He was the Chairman of the Patras Innovation Center, Member of the Board of Directors of COSMOTE (the Greek DCS mobile phone operating company) and Vice Chairman of the Greek Peadagogical Institute. He was in charge, during its design phase, of the multimillion project for training all Greek teachers in the use of IT technologies as an educational tool.

EURASIP Secretary - Treasurer's Report

Opening balance of 192,447.33 EUR was held as follows on 1st January 2001:

CHF cheque account ..... (CHF 159,497.60) ..... 104,945.84 EUR
Euro cheque account ..... 35,749.93 EUR
Euro money market account ..... 48,429.96 EUR
Postal account..... (CHF 5,048.17) ..... 3,321.60 EUR

The EURASIP main account movements during the financial period from 1st January 2001 until 31st March 2002 are documented in the table below in Euros (EUR).

Incoming balance of 1st January 2001			**192,447.33 EUR**
Income: Total:	Membership fees incl. Journal subscriptions	51,747.39 EUR 51,747.39 EUR	
Expenses: Total:	EUSIPCO 2002 loan Administrative personnel Telephone conference calls Elsevier (various concepts) Newsletter Web maintenance Administrative overhead	15,000.00 EUR 8,124.00 EUR 2,450.00 EUR 38,175.42 EUR 5,128.92 EUR 1,190.63 EUR 1,537.99 EUR --- 71,606.96 EUR	
Outgoing balance on 31st March 2002 = **Incoming balance** on 1st April 2002			**172,587.76 EUR**

Total balances at 1st April 2002 in EUR:

CHF cheque account ..... (CHF 113,228.39)..... 76,734.87 EUR
Euro cheque account ..... 41,463.14 EUR
Euro money market account ..... 51,051.34 EUR
Postal account (31/12/2001) ..... (CHF 4,926.09) ..... 3,338.41 EUR

Total in EURO ..... 172,587.76 EUR

Our finances are looking extremely favorable. This can be verified from the previous balances and accounts as given in the NEWSLETTERS and we show a healthy growth in balance.

Calendar of Events

Year	Date	Event	Location	EURASIP Involvement	Chairperson/ Information
2002	November 7-8	IWSSIP'02, 9th International Workshop on Systems, Signals and Image Processing	UMIST, Manchester, U.K.	Cooperation	P. Liatsis http://www.csc.umist.ac.uk /iwssip02
2003	April 23-25	PCS-03, Picture Coding Symposium	Saint Malo France	Cooperation	Christine Guillemot, Claude Labit http://www.irisa.fr/pcs2003
	June 8-11	NSIP-03, Nonlinear Signal and Image Processing	Grado, Italy	Cooperation	G. Sicuranza, G. Vernazza http://ipl.univ.trieste.it/ nsip03
	July 2-4	EC-VIP-MC-2003 4th EURASIP Conf. On Video/Image Processing and Multimedia Com/tions	Zagreb, Cratia	Sponsor	Branka Zovko-Cilhar http://www.vcl.fer.hr /ec2003/
	July 8-11	Visual Communications and Image Processing 2003	Lugano, Switzerland	Cooperation	T. Ebrahimi , T. Sikora http://www.vcip2003.ch

Sergios Theodoridis
EURASIP Conference and Workshop Coordinator

The ADCOM invites EURASIP members to send in to the Newsletter Editor appropriate announcements that they wish to be communicated to the Signal, Speech and Image Processing community.

The Editor reserves the right to edit these to fit into the available space as appropriate for the next newsletter publication.

2002 AdCom Elections Form

Deadline for Mail voting: *23 August 2002* (for return address see newsletter inside cover)
Deadline for Direct voting: *4 September 2002* (General Assembly Meeting at EUSIPO 2002)

Please cross 3 of the candidates and mail it to the AdCom's President Prof. Peter M. Grant (address see newsletter inside cover):

❑ Helmut Bölcskei	❑ Francis Castanié	❑ Jonathan Chambers
❑ Ferran Marqués	❑ Bob Stewart	❑ Sergios Theodoridis

EURASIP Membership Application

Please check:
- ❑ I wish to become a EURASIP member from now on.
- ❑ This institution wishes to become an institutional EURASIP member from now on.
- ❑ I enclose a copy of my student/retirement certificate to be entitled to pay reduced fees.

I/We wish to subscribe to the journal(s):
- ❑ Signal Processing
- ❑ Speech Communication
- ❑ Image Communication
- ❑ Applied Signal Processing

Name:
Institution (if applicable):

Address:

Please mail to: **EURASIP,** European Association for Signal, Speech and Image Processing
P.O. Box 134; CH-1000 Lausanne 13, Switzerland