



**Meeting of the
SOCIETY OF APPLIED NEUROSCIENCE**
www.applied-neuroscience.org



in collaboration with
COST B27 Action: Electric Neuronal Oscillation & Cognition
May 7th – 11th Seville, Spain

<http://san-seville2008.unicongress.org/>

Invited Speakers

Andrew C. Papanicolaou (Magnetoencephalography)
Georg Northoff (fMRI)
Arne Dietrich (Creativity, hypofrontality and exercise)
Juri Kropotov (ADHD)
Christa Neuper (NIRS)
Thomas Elbert (PTSD)
José M. Domínguez-Roldán (Cerebral Death)
Linas A. Bieliauskas (Cognitive Reserve and Aging)
Francisco Murillo-Cabezas (Neuroimaging in ICUs)
Eric Vermetten (PTSD)

Co-Chairs SAN'08

José León-Carrión
John Gruzelier

Local Steering Committee

Juan Francisco Martín-Rodríguez
Jesús Damas-López
Juan Manuel Barroso y Martín

TIME	Wednesday May 7th 2008			
ROOM	SOROLLA 1	SOROLLA 2	SOROLLA 3	SOROLLA 4
10.00	10.00 – 14.00 hr. Workshop <i>Biofeedback Platform (NeuroBird) for posture & equilibrium disorders</i> Montserrat Altemir, Juan M. Barroso & Umberto León-Domínguez	10.00-18.00 hr. SAN Accreditation Module <i>QEEG hands-on recording, data analysis and applications</i> Tony Steffert & Tomas Ros	10.00-18.00 hr. SAN Accreditation Module <i>Quantitative EEG and event related potentials as biological markers of brain function and dysfunction</i> Juri Kropotov	10.00 – 14.00 hr. SAN Accreditation Module <i>Neurofeedback hands-on introduction</i> Lesley Parkinson & Beverly Steffert
10.30				
11.00				
11.30				
12.00				
12.30				
13.00				
13.30	14.00 – 16.00 hr. Lunch Break	14.00–15.00 hr. Lunch Break	15.00 - 20.00 hr. Workshop <i>Multivariate Whole-Head approaches to EEG assessment training + Tele-Neurofeedback with special application of real-time norm-training</i> Thomas Collura & Doerte Klein	
14.00				
14.30				
15.00				
15.30	18.00 – 20.00hr. Workshop <i>SAN Education Track</i> Lesley Parkinson, Beverley Steffert & Andreas Müller	<i>QEEG hands-on recording, data analysis and applications (cont.)</i> (Tony Steffert & Tomas Ros)	<i>Quantitative EEG and event related potentials as biological markers of brain function and dysfunction (cont.)</i>	15.00 - 20.00 hr. Workshop <i>Multivariate Whole-Head approaches to EEG assessment training + Tele-Neurofeedback with special application of real-time norm-training</i> Thomas Collura & Doerte Klein
16.00				
16.30				
17.00				
17.30	18.00 – 20.00 hr. SAN Accreditation Module <i>Psychopharmacology & EEG</i> Tanju Surmeli	<i>QEEG hands-on recording, data analysis and applications (cont.)</i> (Tony Steffert & Tomas Ros)	<i>Quantitative EEG and event related potentials as biological markers of brain function and dysfunction (cont.)</i>	15.00 - 20.00 hr. Workshop <i>Multivariate Whole-Head approaches to EEG assessment training + Tele-Neurofeedback with special application of real-time norm-training</i> Thomas Collura & Doerte Klein
18.00				
18.30				
19.00				
19.30	18.00 – 20.00hr. Workshop <i>SAN Education Track</i> Lesley Parkinson, Beverley Steffert & Andreas Müller	<i>QEEG hands-on recording, data analysis and applications (cont.)</i> (Tony Steffert & Tomas Ros)	<i>Quantitative EEG and event related potentials as biological markers of brain function and dysfunction (cont.)</i>	15.00 - 20.00 hr. Workshop <i>Multivariate Whole-Head approaches to EEG assessment training + Tele-Neurofeedback with special application of real-time norm-training</i> Thomas Collura & Doerte Klein
16.00				
16.30				
17.00				

TIME	Thursday May 8th 2008		
08.00	8.00 hr. Registration desk open		
08.30			
ROOM	ZULOAGA		
09.00	9.00 – 9.45 hr. Opening welcome José León-Carrión Mayor of Seville Excmo. D. Alfredo Sánchez Monteserín SAN President John Gruzelier President of COST ENOC Jordan Pop-Jordanov		
09.30	9.45 – 10.30 hr. Opening Lecture Eduardo Punset (TBC, Title TBC)		
10.00			
10.30	10.30 – 11.00 hr. Coffee Break and Poster Session		
ROOM	SOROLLA 4	SOROLLA 2	SOROLLA 1
11.00	Symposium I: Neurofeedback for ADHD: State of the Evidence Chair & Organiser: Ute Strehl University of Tübingen <i>Long term effects after feedback of slow cortical potentials and of theta-beta-amplitudes in children with ADHD</i> Ute Strehl, Germany <i>Neurofeedback training of SCP in ADHD-specificity</i> Renate Drechsler, Switzerland <i>Neurofeedback in children with attention deficit/hyperactivity disorder: A randomised controlled multisite study</i> Petra Studer, Germany <i>Does Neurofeedback specifically improve impulsivity in ADHD? - Evidence from two prospective randomized studies</i> Martin Holtmann, Germany	11.00 – 13.00 hr. Workshop <i>Hands-on Transcranial Doppler Sonography</i> José María Domínguez-Roldán & Juan José Egea Guerrero University Hospital Virgen del Rocío	Symposium II: Neurorehabilitation Organiser: José León-Carrión University of Seville <i>Rivastigmine treatment in cognitive and behavioral deficits after Traumatic Brain Injury</i> Claudio Perino, Italy <i>Using biofeedback after brain injury to restore balance, equilibrium and posture control</i> Juan Manuel Barroso y Martín, Spain <i>Functional outcome in patients with TBI undergoing late neurorehabilitation</i> Fernando Machuca-Murga, Spain <i>Growth Hormone and Consciousness Impairment</i> Alfonso Leal-Cerro, Spain
11.30			
12.00			
12.30			
ROOM	ZULOAGA		
13.00	Invited Speaker I José María Domínguez-Roldán: <i>Brain Death</i> University Hospital Virgen del Rocío		
13.30			

14.00	14.00 – 16.00 hr. Lunch Break		SOROLLA 3
14.30			
ROOM	ZULOAGA		
15.00	SAN Support Think-Tank		
15.30			
ROOM	SOROLLA 4	SOROLLA 1	
16.00	Symposium III: ADHD: Cognitive Neuroscience Chair: Andreas Muller <i>Neuropsychol. Profiles of children with ADHD</i> Giuseppe Chiarenza, Italy <i>Attention-arousal correlation from classical and quantum perspective</i> Jordan Pop-Jordanov, Macedonia <i>ERP's components of emotional CPT and visual CPT in ADHD adults and controls</i> Silvana Markovska, Macedonia <i>Independent components of ERPs in two EEG-defined ADHD subtypes</i> Gian Candrian, Switzerland <i>Independent components of ERPs in GO/NO-GO task as biological markers of ADHD</i> Juri Kropotov, Russia	Symposium IV: Application of fNIRS in Biomedicine Chair: Banu Onaral Drexel University <i>Near-Infrared Based Functional Optical Brain Monitor (fNIR)</i> Kurtulus Izzetoglu, USA <i>fNIRS: An Interdisciplinary Approach to Brain Imaging of Cognitive and Motor Activities</i> Patricia A. Shewokis, USA <i>Time Course of Activation in the Brain is important when processing cognitive and emotional stimuli</i> José León-Carrión, Spain <i>Real-time feedback of regional brain oxygenation using multi-channel near-infrared spectroscopy (NIRS)</i> Christa Neuper, Austria	14.00 – 18.00 hr. Workshop <i>Hands-on Computerized neuropsychological testing</i> Jesús Damas-López, Fernando Machuca-Murga, Juan M. Barroso y Martín & José León-Carrión University of Seville Center for Brain Injury Rehabilitation (C.RE.CER)
16.30			
17.00			
17.30			
18.00	Poster Session		
18.30	Invited Speaker II Georg Northoff: <i>Prefrontal Cortical Function during Perception and Judgment of Emotions in Depression</i> Otto-Von-Guericke University Magdeburg	18.00 – 20.00 hr. Workshop <i>Experienced-based Dutch & SAN neurofeedback & QEEG Training Curriculum</i> Berrie Gerrits & Wytze van der Zwaag Psychologenpraktijk Gerrits	18.00 – 20.00 hr. Workshop <i>Clinical Application of the Neurological Aspects of Lenses</i> Deborah Zelinsky The Mind-Eye Connection
19.00			
19.30	Special Presentation José León-Carrión: <i>Infrascanner: a New Tool for Detecting Intracranial Haematomas in Situ</i> University of Seville		
20.00			
20.30	Welcome Reception Real Alcazar Of Seville		

TIME	Friday May 9th 2008		
ROOM	ZULOAGA		
09.00	9.00 – 10.00 hr. Invited Speaker III		
09.30	Juri Kropotov: <i>ERP-based independent components as biological markers of ADHD</i> Institute of the Human Brain of Russian Academy of Sciences, Norwegian University of Science and technology		
ROOM	SOROLLA 4	SOROLLA 1	SOROLLA 2
10.00	10.00 – 12.00 hr. Symposium V: Neurofeedback & Performing Arts: Controlled Studies Chair: John Gruzelier Goldsmith University of London <i>Alpha/theta versus SMR training at the Royal Academy of Dramatic Art</i> John Gruzelier UK <i>The effect of Alpha/theta and heart rate coherence training on creative dance performance</i> Trevor Thompson, UK <i>Effects of EEG-Biofeedback training on professional singing performances</i> Boris Kleber, Germany <i>Alpha/theta versus SMR training for novice singers/advanced instrumentalists.</i> Joseph Leach, UK	10.00 – 12.00 hr. Symposium VI: Cognitive Impairment Chair: Lesley Parkinson Brainhealth, Diagnostic Clinic <i>Preliminary EEG and sMRI findings in Five South African Cases of Urbach-Wiethe</i> Barak Morgan, South Africa <i>Cognitive impairment evaluated with a clustering procedure and psychophysiological measures in differing Multiple Sclerosis clinical subgroups</i> Javier J. Gonzalez-Rosa, Spain <i>Increased white matter radial diffusivity is related to reduced episodic memory in mild cognitive impairment patients only if csf t-Tau levels are normal</i> Ramune Grambaite, Norway <i>A Theoretical Model and a Clinical Approach: Individually Optimized Protocol-based Training</i> Siegfred Othmer, USA <i>Neuropsychological assessment of attention in children with spina bifida and hydrocephalus</i> Gabriel G. de la Torre (Spain)	10.00 – 12.00 hr. Symposium VII: New Approaches I Chair: Jordan Pop-Jordanov Macedonian Academy of Sciences and Arts <i>Early human vision as revealed by MEG</i> Selma Supek, Croatia <i>Cortical Networks Activation for Causal Inferences: An fMRI Investigation</i> Jose A. León Cascón, Spain <i>Neurological organization and developmental rate increase</i> María José Álvarez Alonso, Spain <i>Generating of special visual stimuli for neurofeedback</i> Olga Grechko, Israel <i>SMR training with an ecologically valid display</i> Tony Steffert, UK
10.30			
11.00			
11.30			
12.00	12.00 – 12.30 hr. Coffee Break & Poster Session		
ROOM	ZULOAGA		
12.30	12.30 – 13.30 hr. Invited Speaker IV		
13.00	Arne Dietrich: <i>The Neuroscience of Creativity</i> American University of Beirut		
13.30			
14.00	14.00-16.00 hr. Lunch Break		
14.30			

ROOM	ZULOAGA		
15.00	SAN ANNUAL GENERAL MEETING		
15.30			
ROOM	SOROLLA 4	SOROLLA 1	SOROLLA 3
16.00	<p>16.00 – 18.00 hr. Symposium VIII: EEG Correlates & Learned Control Chair: Juri Kropotov Institute of the Human Brain of Russian Academy of Sciences, Norwegian University of Science and technology</p> <p><i>Comparison of event-related desynchronisation and synchronisation spatio-temporal patterns during a response inhibition task in healthy controls and children with Fetal Alcohol Spectrum Disorder (FAS)</i> Colin Andrew, South Africa</p> <p><i>Increase of beta and gamma bands of EEG in multiple sclerosis patients</i> Manuel Vázquez, Spain</p> <p><i>Age-related alpha activity change differs for males and females and for low and high alpha frequency EEG patterns</i> Olga Bazanova, Russia</p> <p><i>Differences in SMR amplitude after feedback with consonant and dissonant sounds</i> Marinus Breteler, The Netherlands</p> <p><i>Active visual flicker training for neurotherapy of mental diseases with EEG alpha activity deficit</i> Alexander Kaplan, Russia</p>	<p>16.00 – 18.00 hr. Symposium IX: Brain Computer Interfaces Chair: Crista Neuper Graz University of Technology</p> <p><i>Navigation BCI based on Touch Evoked Potentials</i> Jan van Erp, The Netherlands</p> <p><i>Comparison of Discrete-trial based SMR, SCP and GSR Training and the Interrelationship Between these Measures: Implication for BCI and NFB</i> Desiree Spronk, The Netherlands</p> <p><i>Neuroscience and User Interfaces: Symbiosis Beyond BCI</i> Jan van Erp, The Netherlands</p> <p><i>BCI and stroke rehabilitation</i> Ander Ramos, USA</p> <p><i>fMRI-BCI: A Tool for Neuroscientific Research and Treatment</i> Andrea Caria, Germany</p>	<p>16.00 – 18.00 hr. Workshop <i>BrainMaster Technical Workshop</i> Thomas Collura BrainMaster Technologies</p>
16.30			
17.00			
17.30			
18.00	18.00 – 18.30 hr. Coffee Break & Poster Session		
ROOM	ZULOAGA		
18.30	<p>18.30 – 19.15 hr. Invited Speaker V Andrew C. Papanicolaou: <i>Clinical Uses of Magnetoencephalography: an Overview</i> The University of Texas</p>		
19.00			
19.30	<p>19.15 – 20.00 hr. Invited Speaker VI Francisco Murillo-Cabezas: <i>Multimodal neuromonitoring (MM) in head-injured patients</i> University Hospital Virgen del Rocio, Seville</p>		
20.00	Andalusian Alfresco Dinner (On your own)		
20.30			
21.00			

TIME	Saturday May 10th 2008		
ROOM	ZULOAGA		
09.30	Invited Speaker VII		
10.00	Eric Vermetten: <i>Windows of Opportunities in PTSD Neuroscience Research</i> University Medical Center, Utrecht		
ROOM	SOROLLA 4	SOROLLA 1	SOROLLA 3
10.30	Symposium X: Controlled Optimal Performance Studies Chair: John Gruzelier Goldsmith University of London <i>Biofeedback Modalities for Better Achievement in High School Students</i> Nada Pop-Jordanova, Macedonia <i>The Effectiveness of Neurofeedback for Improving Attention</i> Alexander Logemann, The Netherlands <i>Optimising Microsurgical Skills with EEG-Neurofeedback</i> Tomas Ros, UK <i>Alpha-activity fluctuations in various hormonal states and associated with them musical performance proved differently in the opposite individual alpha peak frequency groups</i> Olga Bazanova, Russia	Symposium XI: Advances in Acquired Brain Injury Chair: José León-Carrión University of Seville <i>Predicting good/poor functional recovery in patients with ABI using QEEG global measures</i> José León-Carrión <i>Vegetative state and rehabilitation: Italian guidelines</i> Roberto Rago, Italy <i>Assessment of frontal lobe functioning with computerized Seville Neuropsychological Test Battery (BNS 2.0)</i> Jesús Damas-López, Spain <i>QEEG differences in low-level response brain injury patients: minimal conscious state vs. severe neurocognitive disorder</i> Juan Francisco Martín-Rodríguez	10.30-14.00 hr. Workshop <i>Application of the HBI normative database for diagnosis and neurotherapy with ADHD children</i> Andreas Müller, Switzerland
11.00			
11.30			
12.00			
ROOM	ZULOAGA		
12.30	12.30 – 14.30 hr. COST B27 MANAGEMENT John Gruzelier SAN President Jordan Pop-Jornadov President of COST ENOC	Coffee Break & Poster Session	
13.00		13.00 – 14.00 hr. Invited Speaker VIII George Zouridakis: <i>Phase Effects of the Ongoing EEG Activity on the Auditory Evoked Response</i> University of Houston	
13.30			
14.00	14.00 – 16.00 hr. Lunch Break		
14.30			
15.00			
15.30			

ROOM	SOROLLA 4	SOROLLA 1	SOROLLA 3
16.00	<p>Optimal Performance Curriculum Roundtable</p> <p>Chairs: John Gruzelier & David Vernon Goldsmith University of London & Canterbury Christ Church University John Gruzelier, UK David Vernon, UK Arne Dietrich, Lebanon Juri Kropotov, Russia Olga Bazanova, Russia Nada Pop-Jordanova, Macedonia Giancarlo Mirmillo, Italy Siefried Othmer, USA</p>	<p>Symposium XII: Blast-Induced Brain Injury: The Challenges in Defining Mechanisms and Diagnosis and treatment Strategies</p> <p>Chair: Maria Mayorga US Army</p> <p><i>Science of blast-induced injury and proposed mechanisms of brain injury</i> Maria Mayorga, USA</p> <p><i>Blast-Induced Traumatic Brain Injury: Diagnosis and Treatment</i> Ronald Riechers, USA</p> <p><i>Mechanisms of blast-induced brain injury in large and small animal models</i> Annette Saljo, Sweden</p> <p><i>Rehabilitation of traumatic brain-injury military and veteran personnel</i> Karen Schwab, USA</p>	<p>Symposium XIII: New Approaches II</p> <p>Chair: Nada Pop-Jordanova Macedonian Academy of Sciences and Arts</p> <p><i>Multivariate proportional EEG biofeedback using live Z scores</i> Thomas Collura, USA</p> <p><i>Peripheral Biofeedback for Therapy of Stuttering Persons</i> Wlodzimierz Klonowski, Poland</p> <p><i>The system for biofeedback based on measurement of CO2 saturation</i> Robert Stepien, Poland</p> <p><i>QEEG based rTMS treatment for depression: Efficacy and Treatment Effects on QEEG and Neuropsychology</i> Martijn Arns, The Netherlands</p>
16.30			
17.00			
17.30			
18.00	18.00 – 18.30 hr. Coffee Break & Poster Session		
ROOM	ZULOAGA		
18.30	18.30 – 19.30 hr. Invited Speakers IX		
19.00	Christa Neuper & Gert Pfurtscheller: <i>The Role of Brain Oscillations in Brain Computer Interface (BCI)</i> Graz University of Technology		
19.30			
20.00			
20.30			
21.00	21:00 Conference Gala Dinner		

TIME	Sunday May 11th 2008	
ROOM	ZULOAGA	
09.00	Invited Speakers X Thomas Elbert: <i>Treatment of Tinnitus, derived from basic neuroscience</i> University of Konstanz	
09.30	Thomas Elbert & Maggie Schauer: <i>Psychophysiology of the defence cascade – Implications for the treatment of Post-Traumatic Stress Disorder (PTSD) and dissociative disorders</i> University of Konstanz	
ROOM	SOROLLA 4	SOROLLA 1
10.00		Symposium XIV: Controlled Treatment Studies Chair: Soren Andersen Mental Fitness & Forkningscenter, Denmark
10.30	Consciousness Roundtable Chair: José León-Carrión University of Seville José León-Carrión, Spain	<i>The Impact of Neurofeedback Vs. Biofeedback in Insomnia Patients: A Preliminary Study</i> Aisha Cortoos, Belgium
11.00	Andrew C. Papanicolaou Georg Northoff, Germany José M. Domínguez-Roldán, Spain	<i>The Effects of Neurofeedback in Dyslexia</i> Sabine de Ridder, The Netherlands
11.30		<i>Inter-Hemispheric and Lateralized Frequency-Optimized Bipolar Training</i> Siegfred Othmer, USA <i>Post WISC-R and TOVA Improvement with QEEG Guided NF Training in Mentally Retarded: 23 Cases</i> Tanju Sürmeli, Turkey
12.00	Coffee Break	
ROOM	ZULOAGA	
12.30	Invited Speaker XI. Closing Lecture Linus Bieliauskas: <i>Implications of age-related cognitive and sensory changes for functional performance</i> University of Michigan Medical Center	
13.00		
13.30	Conference Close José León-Carrión John Gruzelier	