

# 国际临床电生理联盟脑电时空分析 Guidelines 研讨会暨 第五届国际神经信息研讨会

(第 2 轮通知)

由国际临床电生理联盟(IFCN)与电子科技大学联合主办，电子科技大学生命科学与技术学院、信息医学研究中心、神经信息教育部重点实验室与四川省认知科学学会联合承办的国际临床电生理联盟脑电时空分析 Guidelines 研讨会暨第五届神经信息国际研讨会定于 2017 年 9 月 24-26 日（24 日报到，25-26 日会议）在四川省成都市电子科技大学举办，现将会议事项通知如下。

## 一、会议内容

本次会议包括两部分：

第 1 部分由 Guidelines 编写专家组邀请的专家于 9 月 25 日就一些关键问题 (Controversies) 进行研讨，日程见附件 1，Guidelines 的撰写专家及内容目录见附件 2。

第 2 部分由中国相关专家于 9 月 26 日围绕神经信息相关问题进行研讨。

## 二、部分与会专家名单

中国专家（按姓氏拼音字母排序）：

陈华富，电子科技大学教授

雷 旭，西南大学教授

李 凌，电子科技大学教授

罗跃嘉，深圳大学教授

王玉平，首都医科大学宣武医院教授

夏 阳，电子科技大学教授

徐 鹏，电子科技大学教授

尧德中，电子科技大学教授

周仁来，南京大学教授

外国专家（按首字母排序）：

Claudio Babiloni, University of Rome, Italy

Jaeseung Jeong, Korea Advanced Institute of Science and Technology, South Korea

Katarzyna Blinowska, University of Warsaw, Poland

Mark Hallett, National Institutes of Health, USA

Pedro Valdes Sosa, University of Electronic Science and Technology of China,  
China/Cuban Neuroscience Center, Cuba

Robert Ostenveld, Radboud University, Netherlands

Thomas Koenig, University of Bern, Switzerland

### 三、会议费用

非学生 2000 元，学生 1600 元。

以上费用推荐以汇款方式支付，会议报到现场可刷卡（不收现金）。汇款转账信息如下：

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特别注意：电子科技大学本校参会人员请联系组委会开具内部结算单，切勿直接转账。

### 四、会议报名及联系方式

请有意参加会议的同行，尽快填写参会回执（附件 3），于 9 月 20 日前发送到 [cognitivesci@163.com](mailto:cognitivesci@163.com)，以便会务安排。

会议联系邮箱：[cognitivesci@163.com](mailto:cognitivesci@163.com)；联系电话：028-61830867

第五届国际神经信息研讨会组委会  
电子科技大学生命科学与技术学院（代章）

2017 年 8 月 25 日

## 附件 1 (APPENDIX I)

### THE WHORKSHOP IFCN Guidelines on the Frequency and Topographical Analysis of Resting State EEG (rsEEG) in Clinical Neurophysiology: The Controversies 25th of SEPTEMBER 2017, Chengdu, China



#### **TITLE:**

IFCN Guidelines on the Frequency and Topographical Analysis of Resting State EEG (rsEEG) in Clinical Neurophysiology: The Controversies.

**THE FIRST SESSION** (120 minutes + Coffee break of 15 minute):

The resting state EEG rhythms: Neurophysiology and Recording

Chairmen: Mark Hallett and Dezhong Yao

**THE IFCN GUIDELINES** (Mark Hallett, 10 minutes)

**THE NEUROPHYSIOLOGY OF RESTING STATE EEG RHYTHMS.** The brain generation mechanisms (Claudio Babiloni, 20 minutes);

**WHICH REFERENCE ELECTRODE FOR INVESTIGATING EEG RHYTHMS?** Cephalic, non-cephalic, common average references (Robert Ostenveld; 20 minutes) vs. REST modeling (Dezhong Yao, 20 minutes); Open Discussion: 5 minutes.

**WHAT ELECTRODE MONTAGE?** Looking for the electrode montage for rsEEG in CLINICAL APPLICATIONS (Matti Hamalainen; 20 minutes) vs. NEUROPHYSIOLOGY RESEARCH (Pedro Valdes Sosa, 20 minutes). Open Discussion: 5 minutes.

Coffee break: 15 minutes

**THE SECOND SESSION (150 minutes + Coffee break of 15 minute):**

The resting state EEG rhythms: Cortical synchronization and connectivity

Chairmen: Claudio Babiloni and Pedro Valdes-Sosa

**SENSORS OR SOURCES?** Opportunities and limitation of topographical analysis of rsEEG rhythms at **SCALP SENSORS** (Katarzyna Blinowska; 20 minutes) vs. **SOURCES** (Pedro Valdes Sosa; 20 minutes) vs.; Open Discussion: 5 minutes.

**LINEAR OR NONLINEAR MEASUREMENTS?** Computation of **LINEAR** (Robert Ostenveld; 20 minutes) vs. **NONLINEAR** (Jaeseung Jeong; 20 minutes) measurements of rsEEG rhythms; Open Discussion: 5 minutes.

Coffee break: 15 minutes

**DISEASE MARKERS OR WINDOWS ON HUMAN NEUROPHYSIOLOG?** Limits and opportunities in the use of the frequency and topographical rsEEG analysis in **CLINICAL APPLICATIONS** (Mark Hallett; 20 minutes) and **NEUROPHYSIOLOGY RESEARCH**. (Claudio Babiloni; 20 minutes). Open Discussion: 5 minutes.

**FINAL REMARKS** (Pedro Valdes-Sosa; 10 minutes).

**附件 2 : Guidelines 撰写专家和目录**  
**(APPENDIX II: The authors and the contents of the Guidelines)**

Version of 21st of April 2017 for Clinical Neurophysiology  
International Federation of Clinical Neurophysiology (IFCN) guidelines for topographic and frequency analysis of electroencephalographic rhythms

1) Dr. Claudio Babiloni (Coordinator and expert of linear frequency analysis and topographical source estimation of EEG for clinical applications in dementing disorders)

[claudio.babiloni@uniroma1.it](mailto:claudio.babiloni@uniroma1.it)

Department of Physiology and Pharmacology "V. Erspamer"

University of Rome "La Sapienza"

P.le A. Moro 5, 00185, Rome, Italy

Phone/Fax: 0039 0649910989/0917

EUROPE

2) Dr. Wolfgang Klimesch (Expert of the frequency analysis of phase- and nonphase-locked EEG rhythms for cognitive neuroscience)

[wolfgang.klimesch@sbg.ac.at](mailto:wolfgang.klimesch@sbg.ac.at)

Centre for Cognitive Neuroscience, University of Salzburg, Salzburg, Austria

Hellbrunnerstrasse 34, 5020 Salzburg, Austria

Phone: +43 (0) 662 / 8044 – 5148, Fax: +43 (0) 662 / 8044 – 5126

EUROPE

3) Dr. Robert Knight (Expert of frequency analysis of intracranial EEG rhythms for cognitive neuroscience and clinical applications)

[rtknight@berkeley.edu](mailto:rtknight@berkeley.edu)

Department of Psychology, University of California,

Berkeley, CA 94720-1650, California, USA

Phone: 510-642-5292, Fax: 510-642-5293

AMERICA

4) Dr. Pim (Wilhelmus Helena Ignatius Maria) Drinkenburg, (Expert on pharmac EEG analyses & translational neurophysiology)

[WDRINKEN@its.jnj.com](mailto:WDRINKEN@its.jnj.com)

Scientific Director Neuroscience & Janssen Fellow

Janssen Research & Development, Janssen Pharmaceutica NV

(Pharmaceutical Companies of Johnson & Johnson)

Beerse, Belgium

EUROPE

5) Dr. Andrzej Cichocki (Expert of frequency linear and nonlinear analysis of EEG functional connectivity for clinical applications)

[a.cichocki@riken.jp](mailto:a.cichocki@riken.jp)

The RIKEN Brain Science Institute

Laboratory for Advanced Brain Signal Processing

Riken, Brain Science Institute, Japan

Wako Shi, Saitama 351-0198

Phone: +81 48 467 9668 Fax +81 48 467 9686

ASIA

6) Dr. Erol Başar (Expert of frequency analysis of phase-locked event-related EEG oscillations for cognitive neuroscience and clinical applications)

[e.basar@iku.edu.tr](mailto:e.basar@iku.edu.tr)

Brain Dynamics and Cognition Research Center

Istanbul Kultur University, Ataköy Campus

Bakırköy 34156 Istanbul, Turkey

Phone : 0090 (212) 498 43 92, Fax : 0090 (212) 498 45 46  
ASIA

7) Dr. Jaeseung Jeong (Korea Advanced Institute of Science and Technology, KAIST)

[jsjeong@kaist.ac.kr](mailto:jsjeong@kaist.ac.kr)

Professor of Bio and Brain Engineering, KAIST

Decision neuroscience, Nonlinear brain dynamics, Connectome, Computational Neuroscience, Brain-Robot Interface.

He is one of the most important experts of non-linear and complexity EEG markers for clinical applications.

ASIA

8) Dr. Roberto Pascual Marqui (Expert of source analysis of EEG functional connectivity for cognitive neuroscience and clinical applications)

[pascualm@key.uzh.ch](mailto:pascualm@key.uzh.ch)

The KEY Institute for Brain-Mind Research, University of Zurich, Switzerland

Visiting Professor at Neuropsychiatry, Kansai Medical University, Osaka, Japan

EUROPE-ASIA

9) Dr. Paul Nunez (Expert of frequency and topographical source analysis of EEG rhythms for cognitive neuroscience and clinical applications)

[pnunez@tulane.edu](mailto:pnunez@tulane.edu)

Cognitive Dissonance LLC,

Encinitas, CA 92024, USA.

AMERICA

10) Dr. Pedro Valdes Sosa (Expert of topographical source analysis of EEG for clinical applications)

[pedro.valdes.sosa@gmail.com](mailto:pedro.valdes.sosa@gmail.com)

The Cuban Neuroscience Center (CNEURO)

Street. 190 e / 25 and 27, Cubanacan, Playa. Havana. CP 11600, Cuba

Phone: (+53) 7263-7100

AMERICA

11) Dr. Robert Barry (Expert of frequency and topographical analysis of EEG for clinical applications in developmental age)

[rbarry@uow.edu.au](mailto:rbarry@uow.edu.au)

Centre for Psychophysics, Psychophysiology, and Psychopharmacology, Brain & Behaviour Research Institute, and School of Psychology, University of Wollongong, Wollongong NSW 2522, Australia

OCEANIA

12) Dr. Fernando Lopes da Silva (Expert of neurophysiological mechanisms generating EEG rhythms in healthy and diseased humans)

[F.H.LopesdaSilva@uva.nl](mailto:F.H.LopesdaSilva@uva.nl)

Swammerdam Institute for Life Sciences

UNiversity of Amsterdam

Science Park A

Science Park 904 Amsterdam

Postbus 94232

1090 GE, The Netherlands

Phone: 0205257637

EUROPE

13) Dr. Mark Hallett (Expert of frequency and topographical analysis of EEG for clinical applications in motor disorders)

[hallettm@ninds.nih.gov](mailto:hallettm@ninds.nih.gov)

Medical Neurology Branch

Building 10 Room 7D37

10 Center Drive MSC 1428

Bethesda MD 20892-1428

Office: (301) 496-9526

Lab: (301) 496-9526, Fax: (301) 480-2286

AMERICA

## **1. Introduction**

## **2. Recording of rsEEG for topographic and frequency analysis**

- Preliminary assessment of the subject's condition
- Environmental conditions and instructions to subjects
- Montage of the EEG electrodes for the topographical analysis
- Montage of other sensors for control data collection
- Setting of the rsEEG recording parameters

## **3. Storage of EEG and control data**

## **4. Visualization of the EEG and control data**

- Preliminary data analysis
- Identification of neuropathological rsEEG waveforms

## **5. Frequency analysis of rsEEG data**

- “Synchronization”
- Computation of the rsEEG amplitude/power density spectrum
- Absolute and relative rsEEG amplitude/power density
- Computation of nonlinear features estimating the rsEEG complexity
- Connectivity
- Linear measures of connectivity
- Nonlinear measures of connectivity
- The steps of the connectivity analysis

## **6. Topographic analysis of the EEG data**

- Topographic mapping
- Cortical source mapping
- Estimation of scalp current density and dura surface potential
- Mapping cortical connectivity
- The issue of the cortical tangential sources

## **7. Management, statistical analysis, and interpretation of the rsEEG variables**

- Management of the rsEEG variables
- Statistical analysis of the rsEEG variables
- Interpretation of the frequency and topographical rsEEG variables

## **8. References**

**附件 3 : 报名回执 (APPENDIX III: Registration sheet)**

姓名 Name	性别 Sex	工作单位 Affiliation	职务 Title	手机号码 Cell phone	QQ	邮箱 E-mail

注：报名回执请于 9 月 15 日前发送到 [cognitivesci@163.com](mailto:cognitivesci@163.com)

Notice: Please send this registration sheet to [cognitivesci@163.com](mailto:cognitivesci@163.com) by September 20th.