Remote Consciousness:

Latest Results from Optically Excited Electrochemical Impedance Spectroscopy

Dr. Serge Kernbach

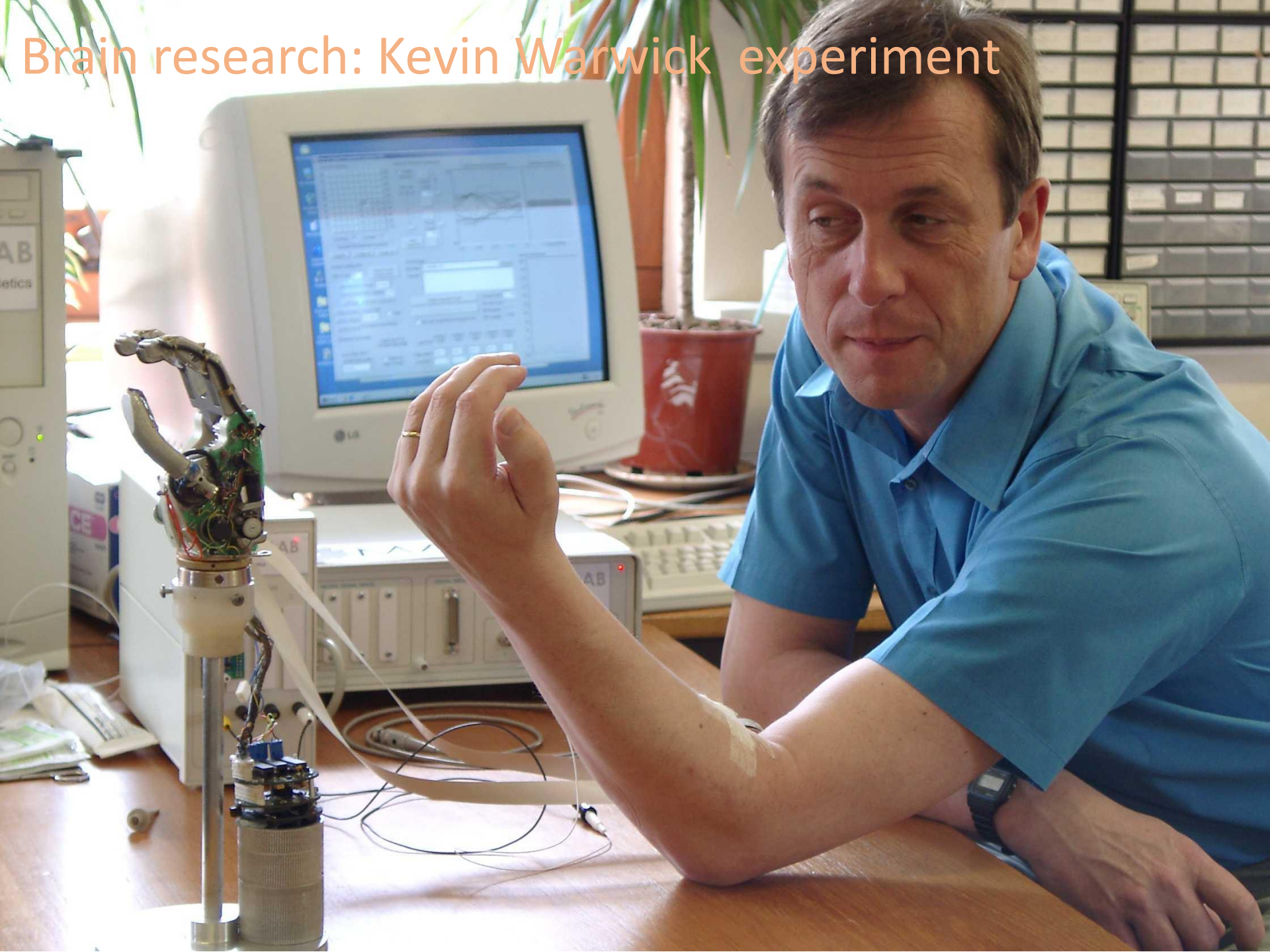
Serge Kernbach, Andreas Kernbach (CYBRES GmbH, Germany), **Anton Fedorenko** (AshNu Technologies Inc., Canada), **Jeremy Pfeiffer** (SVP Water Research, USA), **Gao Peng** (Ennova Health Science and Technology Co., Ltd., China), **Vladislav Zhigalov** (Moscow Institute of Electronic Technology, Russia), **Sergey Maslobrod** (Academy of Science, Moldova)

24.10.19, Water Conference on the Physics, Chemistry and Biology of Water, October 24 – 27 · BAD SODEN, GERMANY

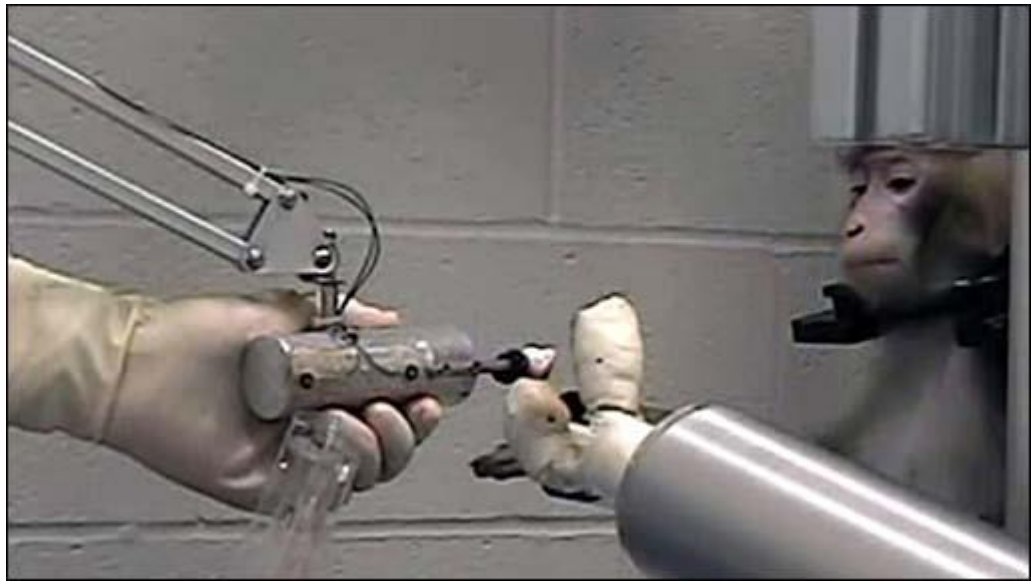
Motivation

technology for brain and consciousness

Brain research: Kevin Warwick experiment

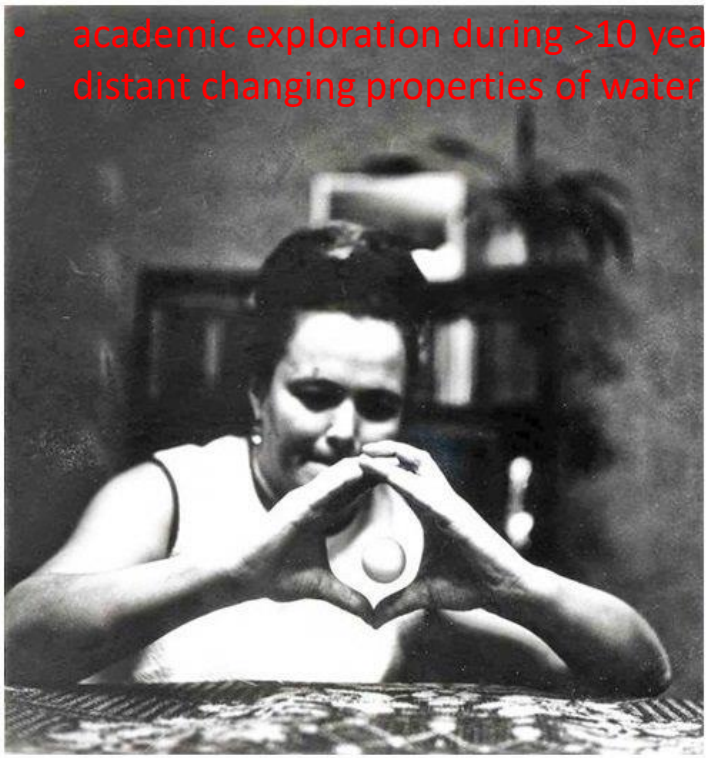


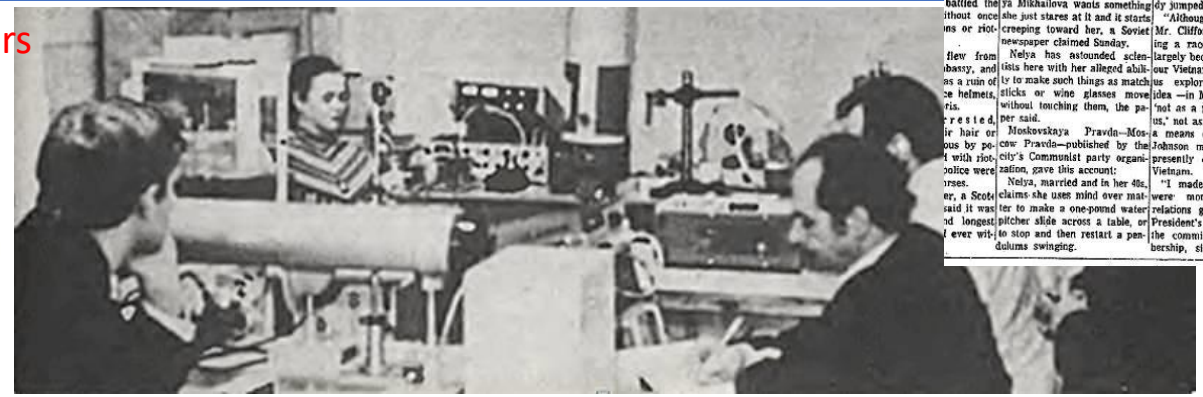
Brain research: Neuro-Implants and Brain-Computer Interface



Consciousness research: Moscow, (Ninel Kulagina) USSR

- academic exploration during >10 years
- distant changing properties of water





Mar 18 1968

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Soviets Say She Beckons With Mind

MOSCOW (AP) — When Nelya Mikhailova wants something she just stares at it and it starts creeping toward her, a Soviet newspaper claimed Sunday.

Nelya has astounded scientists here with her alleged ability to make such things as matchsticks or wine glasses move without touching them, the paper said.

Moskovskaya Pravda—Moscow Pravda—published by the city's Communist party organization, gave this account:

Nelya, married and in her 40s, claims she uses mind over matter to make a one-pound water pitcher slide across a table, or to stop and then restart a pendulums swinging.

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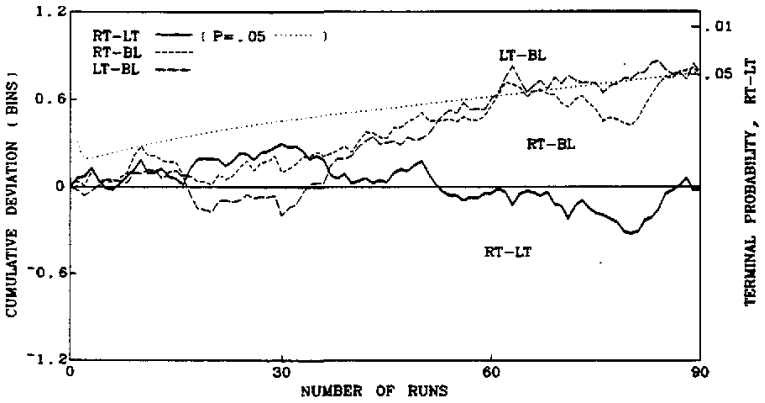
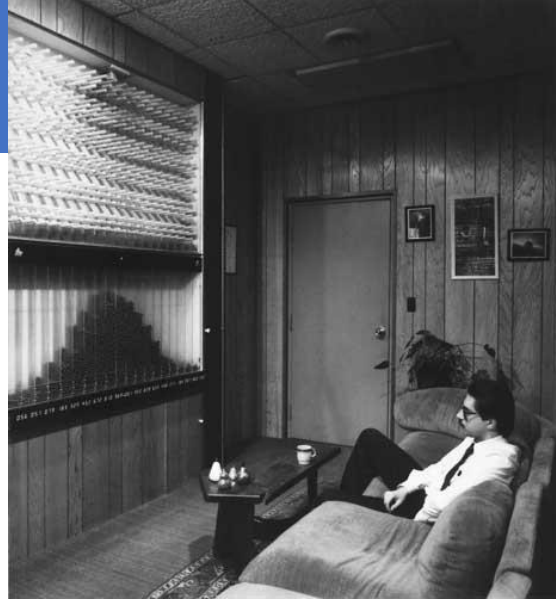
1968: Professional photographer Vladimir Bogatyrev's photo of Ninel Kulagina as she raises a ping pong ball from the table surface using a telekinetic force emitted from or shaped by her hands. *Moskovskaya Pravda* (*Moscow Pravda*) March 17, 1968, article by journalist Lev Kolodny. The following day, the AP wire service reported on Kulagina (identified as Nelya Mikhailova) worldwide.

video

L.E. Kolodnyj, "The D phenomenon"
(Колодный, Феномен 'Д' и другие), Moscow, 1991

Consciousness research: Princeton, USA





Operator-Related Anomalies in a Random Mechanical Cascade, Bruce Dunne, Roger D. Nelson, Robert G. Jahn, JSE, Vol. 2, No. 2, pp. 155-179, 1988

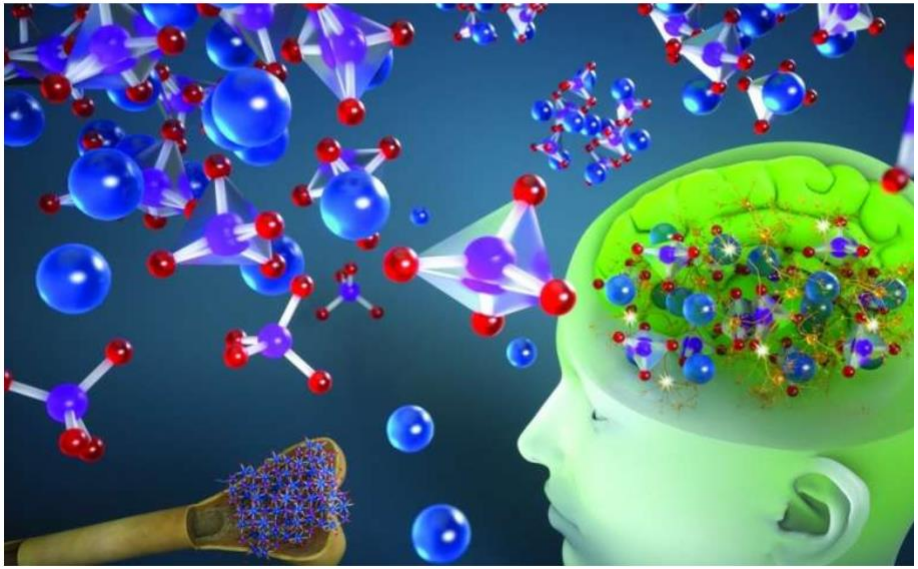
Consciousness: less understood phenomenon

Capability of distant interactions?

Brain, quantum computation and entanglement

Are we quantum computers? International collaboration will investigate the brain's potential for quantum computation

by Sonia Fernandez, University of California - Santa Barbara



Credit: PETER ALLEN ILLUSTRATION/UCSB

PHYS.ORG

SCIENTIFIC REPORTS

Article | OPEN | Published: 20 December 2016

Photon Entanglement Through Brain Tissue

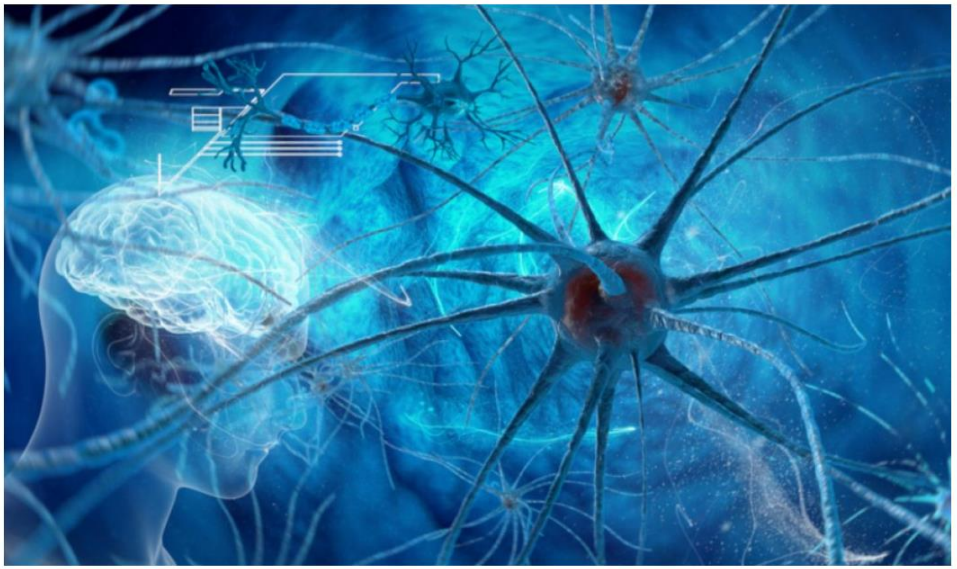
Lingyan Shi, Enrique J. Galvez & Robert R. Alfano

Scientific Reports **6**, Article number: 37714 (2016) | Download Citation

January 17, 2019 • In the Lab • By **Asian Scientist Newsroom**

How Protein 'Entanglement' Leads To Brain Diseases

These findings suggest that preventing protein entanglement could be one way to treat neurodegenerative diseases caused by polyglutamine proteins.



ASIAN SCIENTIST

Macroscopic Entanglement (MA)

nature
International journal of science

Progress Article | Published: 18 June 2008

Quantifying entanglement in macroscopic systems

Vlatko Vedral

Nature **453**, 1004–1007 (19 June 2008) | Download Citation

Abstract

Letter | Published: 25 April 2018

Stabilized entanglement of massive mechanical oscillators

C. F. Ockeloen-Korppi, E. Damskägg, J.-M. Pirkkalainen, M. Asjad, A. A. Clerk, F. Massel, M. J. Woolley & M. A. Sillanpää

Nature **556**, 478–482 (2018) | Download Citation

This article has been updated

Article | OPEN | Published: 13 October 2017

Entanglement between more than two hundred macroscopic atomic ensembles in a solid

P. Zarkeshian, C. Deshmukh, N. Sinclair, S. K. Goyal, G. H. Aguilar, P. Lefebvre, M. Grimau Puigibert, V. B. Verma, F. Marsili, M. D. Shaw, S. W. Nam, K. Heshami, D. Oblak, W. Tittel & C. Simon

Abstract

Quantum entanglement is a phenomenon whereby systems cannot be described independently of each other, even though they may be

PHYSICAL REVIEW A
covering atomic, molecular, and optical physics and quantum information

Entanglement in macroscopic systems

J. Sperling and I. A. Walmsley
Phys. Rev. A **95**, 062116 – Published 20 June 2017

ABSTRACT

Article | OPEN | Published: 26 August 2016

Generation of a macroscopic entangled coherent state using quantum memories in circuit QED

Tong Liu, Qi-Ping Su, Shao-Jie Xiong, Jin-Ming Liu, Chui-Ping Yang & Franco Nori

Scientific Reports **6**, Article number: 32004 (2016) | Download Citation

Macroscopic Entanglement (MA)

ICTS International Centre for Theoretical Sciences
TATA INSTITUTE OF FUNDAMENTAL RESEARCH

ABOUT RESEARCH PROGRAMS OUTREACH PEOPLE ACADEMIC SUPPORT RESOURCES

DISCUSSION MEETING

QUANTUM ENTANGLEMENT IN MACROSCOPIC MATTER

ORGANIZERS Kedar Damle and Subroto Mukerjee

Google

entanglement in macroscopic systems

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Ungefähr 817.000 Ergebnisse (0,27 Sekunden)

Wissenschaftliche Artikel zu **entanglement in macroscopic systems**

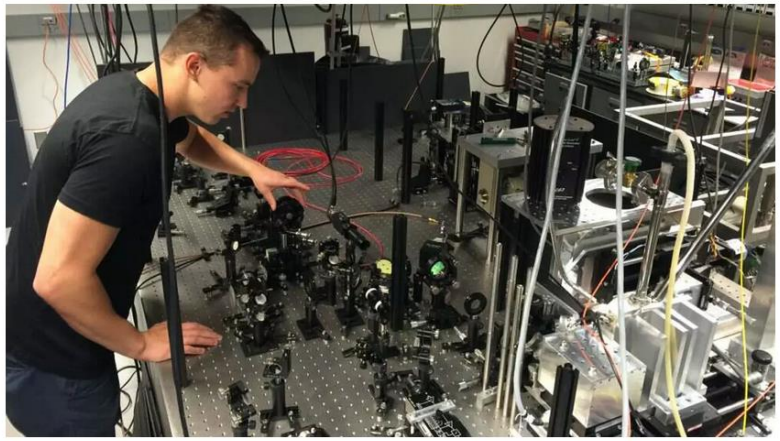
Quantifying **entanglement** in **macroscopic systems** - Vedral - Zitiert von: 195

… and steady state **entanglement** of two **macroscopic** … - Krauter - Zitiert von: 419

Entangled macroscopic quantum states in two … - Berkley - Zitiert von: 510

Macroscopic quantum entanglement achieved at room temperature

Colin Jeffrey | February 2nd, 2016



The researchers believe that the advance could lead to entanglement-enhanced magnetic resonance imaging probes (Credit: Awschalom Group/University of Chicago)

Open Science Research Excellence

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Motivation

Experimental exploration of distant interactions based on macroscopic entanglement

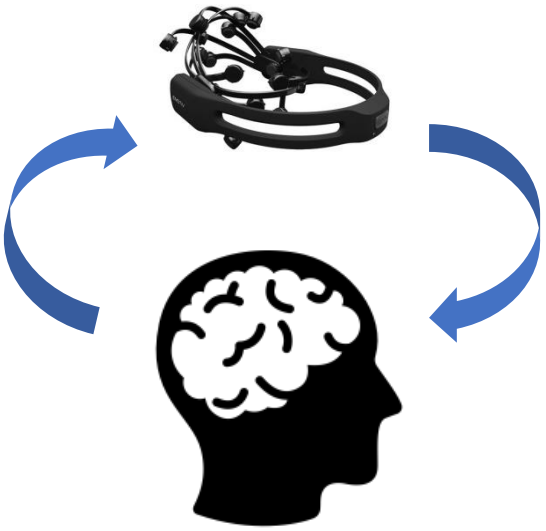
Methodology as in other device-device experiments

Methodology

optically excited EIS in temporal domain

M.I.N.D. – real-time feedback of biological macroscopic entanglement

EEG sensors



local
feedback

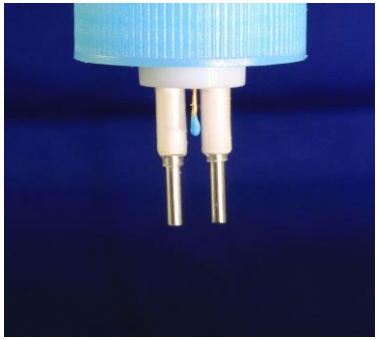
EIS sensors

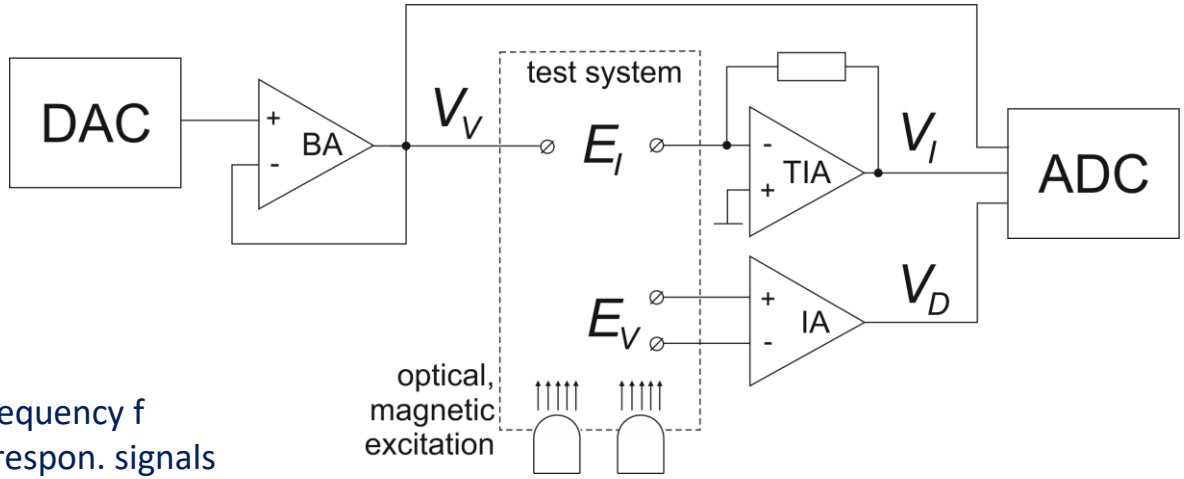
10^1 -- 10^6 meters

distant feedback

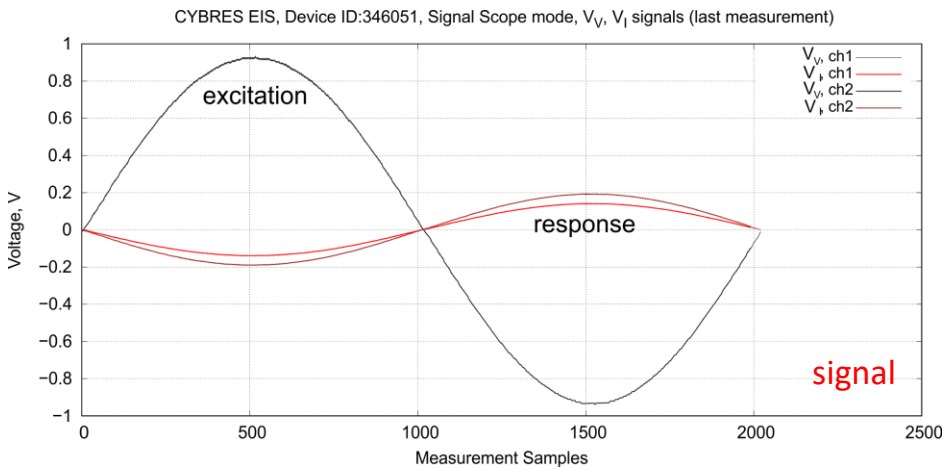
Electrochemical measurements. What is it?

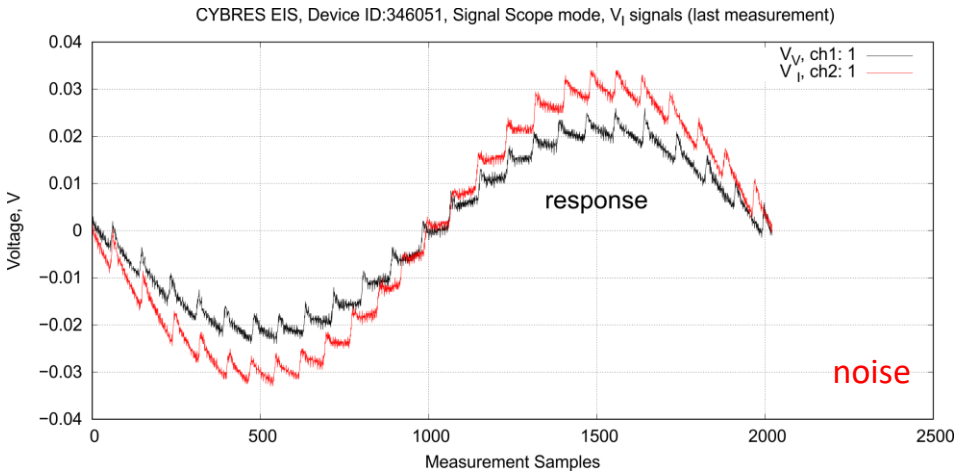
molecular and quantum scale effects appear on macroscopic scale as a change of ionic dynamics





- Impedance (conductivity) at excitation frequency f
- Correlation and Phase between excitat./respon. signals
- Nyquist plot (Re/Im parts of signals, currently not used)
- Electrochemical noise for statistical processing
- time-frequency patterns (vs. only frequency) with optical excitation
- 45 data channels with additional sensors (+35 synthetic channels)

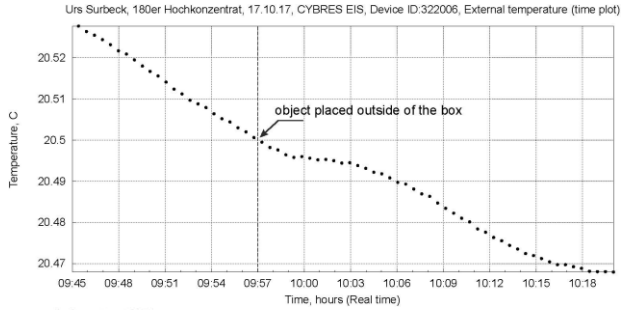


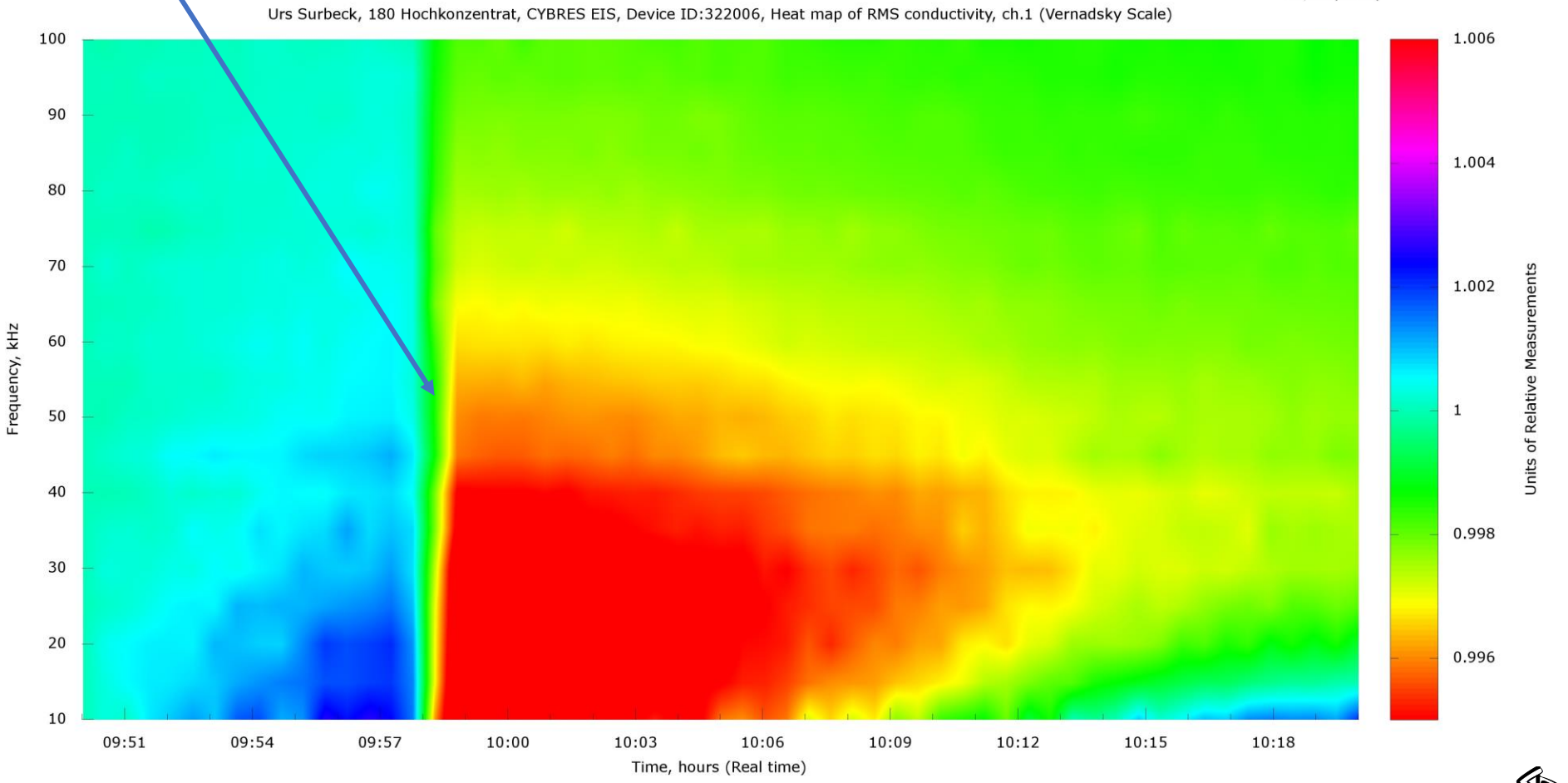


e.g. S.Kernbach, I.Kuksin, O.Kernbach, On Accurate Differential Measurements with Electrochemical Impedance Spectroscopy, WATER, 8, 136-155, 2017

Non-chemical treatment with Urs Surbeck Hochkonzentrat

placed close to electrodes
outside of thermobox



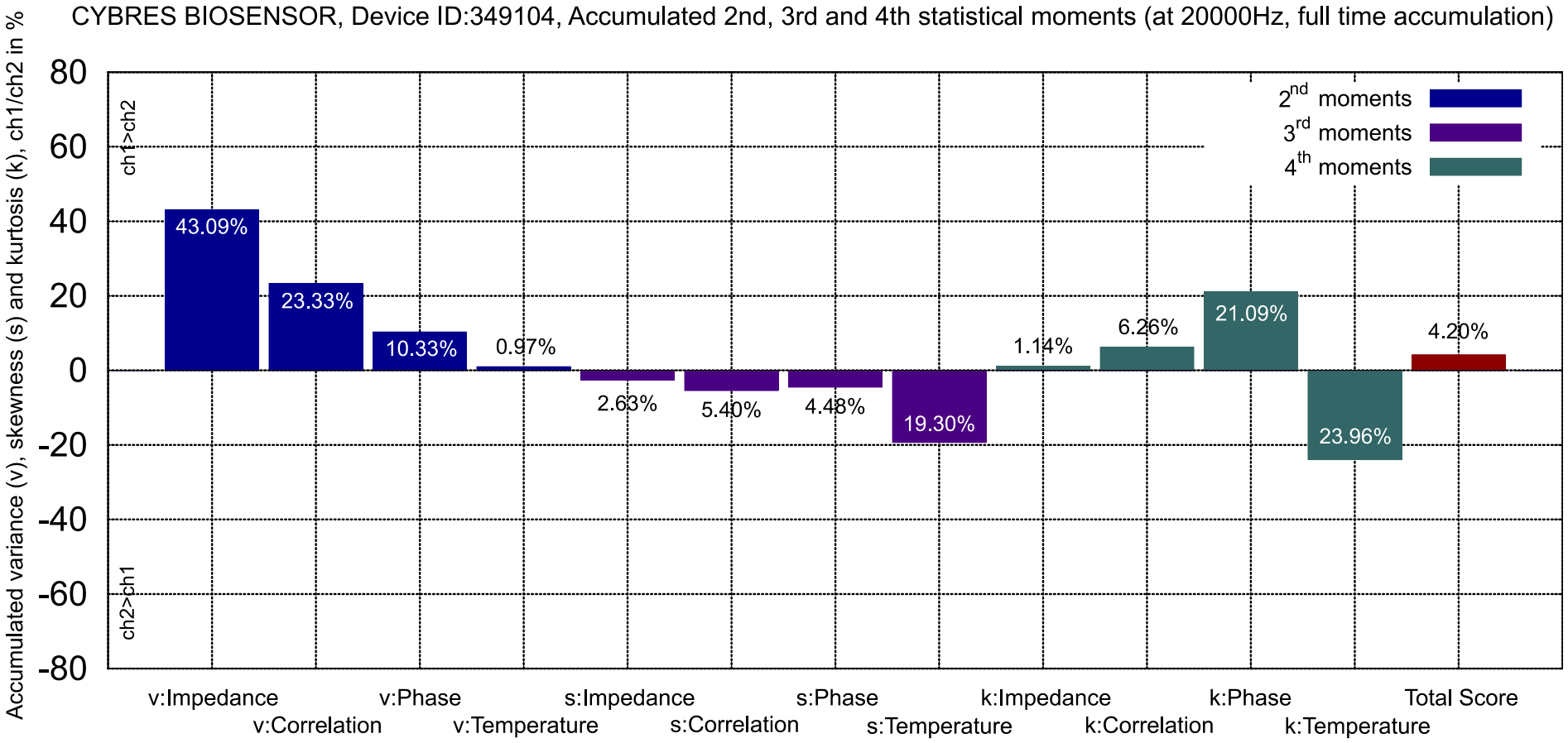


S.Kernbach, On Symbols and Mems (rus), IJUS, 19-20(6), 120-148, 2018

CYBRES

Characterization with statistical moments

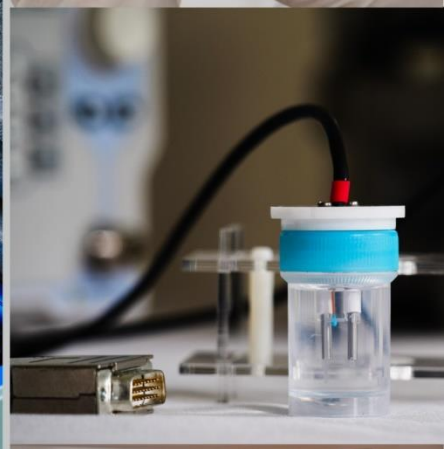
characterization based on 12-component vector



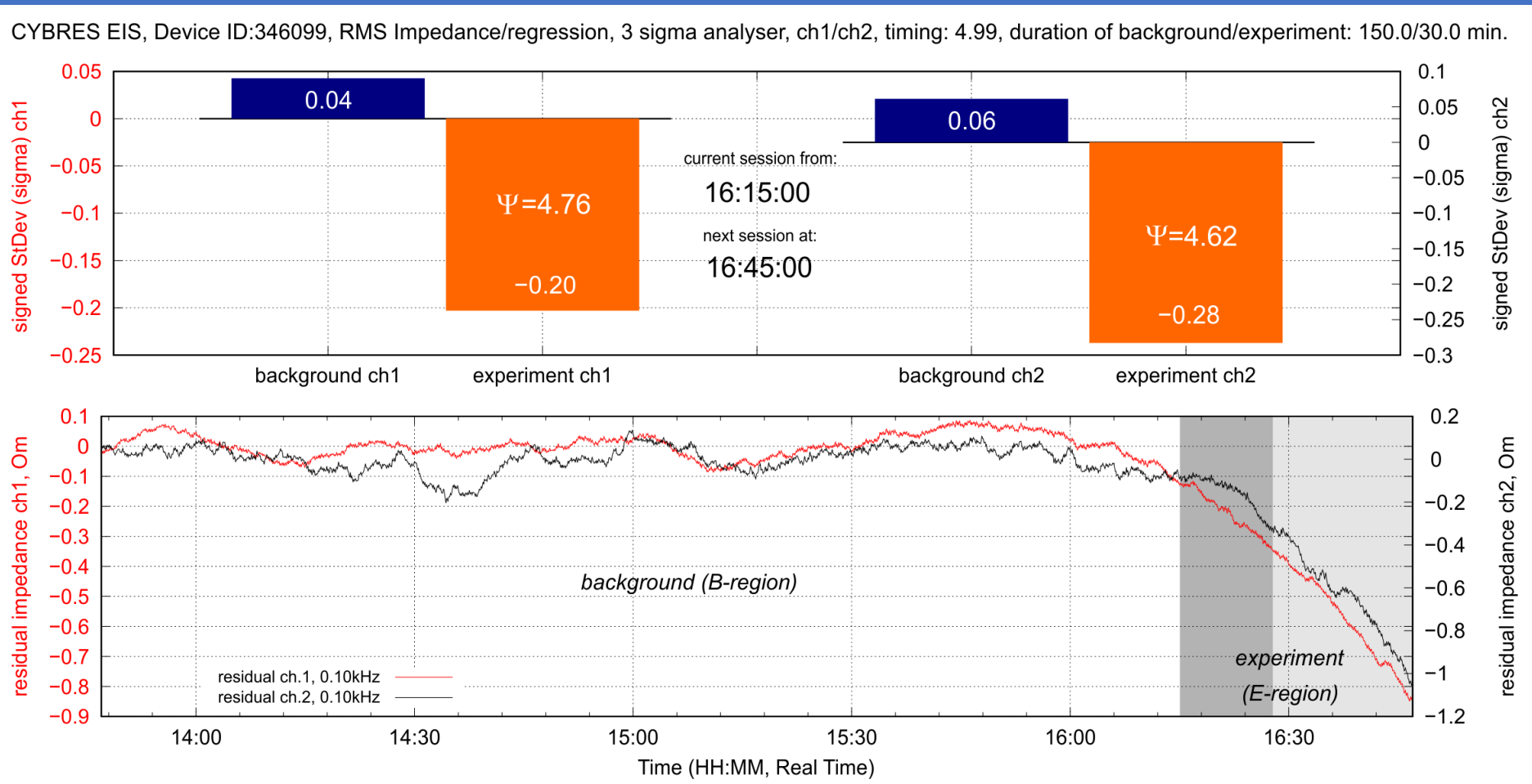
goal: to distinguish infoceutical (imprinted) “info-penicillin” from “into-aspirin”

What is M.I.N.D.?

- ultra-weak changes (on the level of environmental fluctuations –> the main difficulty)
- specific hardware setup (no active thermostat)
- it requires continuously running statistical server (EIS does not need it)
- long stabilization time (2-3 days)
- long-term measurements (weeks)
- different goals and users (reducing complexity, finally - different software)



Numerical and statistical calculations in M.I.N.D.



Intensity

Psi

$$\Psi = k\frac{\sigma_E}{\sigma_B}$$

Probability of Random Occurrence (PRO)

based on measurements from last 24/48 hours

Numerical and statistical calculations in M.I.N.D.

min. N=30

results of active sessions

N	type	time (D-M h:m)	ch1:Ψ	PRO	ch2:Ψ	PRO
1.	1-post	28-Jun 09:00:11	2.09	0.42	9.55	0.02
2.	1-post	28-Jun 09:30:03	2.66	0.29	6.56	0.02
3.	1	06-Jun 08:30:00	-1.52	0.63	-6.11	0.04
4.	3	01-May 20:54:18	5.35	0.08	3.32	2.55
5.	2	23-Jun 23:23:54	-1.17	0.60	5.26	0.01
6.	1	24-Jun 20:00:16	-0.69	0.90	-5.25	0.07
7.	1-post	24-Jun 09:30:05	4.46	0.07	-4.62	0.09
8.	2	06-Jun 22:27:54	-2.52	0.26	-4.60	0.04
9.	1	29-May 08:30:01	4.21	0.06	2.77	0.37
10.	1-post	24-Jun 09:00:14	1.67	0.52	4.07	0.13
11.	1	01-Jul 08:30:13	3.99	0.23	-0.81	0.86
12.	3	10-May 08:30:01	-1.86	0.56	-3.94	0.21
13.	3	06-May 08:30:05	3.87	0.08	-1.18	0.16
14.	2	15-Jun 18:18:51	3.85	0.02	3.16	0.04
15.	2	05-Jun 22:35:15	2.75	0.09	3.75	0.09
16.	1-post	05-Jun 09:02:22	3.74	0.22	-2.27	0.41
17.	1	27-May 08:30:02	-2.00	0.22	-3.69	0.15
18.	1	07-May 08:30:06	2.36	0.30	3.55	0.20
19.	1-post	26-Jun 09:00:06	-1.64	0.54	3.36	0.28
20.	1	05-Jun 08:32:14	2.77	0.32	-3.29	0.26
21.	1-post	25-Jun 09:30:05	3.20	0.15	-2.39	0.33
22.	1	11-Jun 15:00:11	3.19	0.53	0.57	1.00
23.	1	25-Jun 08:30:06	0.53	1.00	3.14	0.19
24.	1-post	07-Jun 09:00:09	-0.81	0.68	3.01	0.18
25.	1	28-May 08:30:06	1.10	0.81	-2.94	0.40
26.	1	13-Jun 09:00:02	1.24	0.49	2.92	0.20
27.	1-post	07-Jun 09:30:01	1.59	0.39	-2.79	0.27
28.	1-post	13-Jun 09:30:12	-2.74	0.25	-2.63	0.24
29.	2-post	10-Jun 23:20:16	2.00	0.23	2.63	0.09
30.	1-post	13-Jun 10:00:04	2.58	0.26	2.19	0.32

numerical: mean intensity
probabilistic: joint PRO
statistic: Mann-Whitney test

A: mean Ψ of active sessions/mean Ψ of all sessions: 4.06/2.12=1.92, (1.96)
B: joint Probabil.Rand.Occur.(j-PRO): active ses./0.5 ses.: 4.12e-20
C: Mann-Whitney test (positive if < critical value): 12 (292 :1%, 338 :5%)

M.I.N.D.: Parameter setting, getting started, FAQ, etc., see App. Note 26 (technical manual)

Application Note 26. Methodology and protocols of feedback-based EIS experiments in real time

Serge Kernbach

***Abstract*—This application note is devoted to distant experiments that provide visual or acoustic feedback from remote electrochemical impedance spectroscopy (EIS) sensors. It addresses automatic web experiments as well as experiments with manual evaluation of results, and explains underlying algorithms. Statistical evaluation based on three-sigma rule, probability of random occurrence and the Mann-Whitney U-test are proposed for the scoring system. Operators who only participate in *consciousness-device* or *device-device* experiments (the transmitter side) and who host such sensors (the receiver side) can find here recommendations for parameter settings, thermostabilization, selection of water or the difficulty level. This application note can be considered as step-by-step manual for participating, preparing and conducting such experiments also in neurocognitive way with EEG feedback, e.g. for operator training purposes.**

I. Introduction

This application note accompanies the following papers:

and EIS sensors on the *receiver side* are spatially separated. The terms 'impact', 'exposure', 'session' or 'influence' mean a long-distance signal transmission from transmitters to receivers, where we do not differentiate between human operators ('consciousness-device' experiments) or corresponding devices ('device-device' experiments) on the transmitter side, since both produce comparable results.

The distance between transmitters and receivers varies in a large range (the largest published result is about 13798km [3]). EIS devices can be used remotely (e.g. in internet via html plots) or locally (users have access to EIS devices). In case of remote usage, see Sec. II, all settings are already done and experiments can be started anytime. The remote setup corresponds to average complexity level[1].

In the local case, see Sec. III, users can additionally involve acoustic and EEG feedbacks for training (in individual or

Updates: almost each day, large FAQ section; non-technical manual in preparation

M.I.N.D. technology: open-science approach

NeuroQuantology | September 2016 | Volume 14 | Issue 3 | Page 456-476 | doi: 10.14704/nq.2016.14.3.917

Experimental Approach Towards Long-Range Interactions from 1.6 to 13798 km Distances in Bio-Hybrid Systems

Serge Kernbach*, Vitaliy Zamsha†, Yuri Kravchenko‡

ABSTRACT

This work describes performed experiments on device-device and operator-device interactions at distances of >1 km, >100 km and >10000 km. Experimental setup involves several types of receiving sensors and transmitting optical generators as well as a group of human operators. We analyzed the structure of setup, establishing a connection between receiver and emitter, and multiple effects appeared. The experiments suggest a common character of operator- and device- interactions that point to possible 'neuro-quantum mechanisms' underling both systems. This approach replicates and extends early experiments from 80x and 90x, and can be considered as a novel unconventional communication system.

Key Words: long-range interactions, quantum phenomena in macroscopic systems, non-local effects, communication system, bio-hybrid systems

DOI Number: 10.14704/nq.2016.14.3.917 **NeuroQuantology 2016; 3:456-476**

Operator training for distant interactions with EEG and EIS based feedback

S.Kernbach[1], V.Zhigalov[2], A.Fedorenko[3], J.Pfeiffer[4], G. Peng[5], O.Kernbach[1], A.Kernbach[1], E.Gorokhov[6]

***Abstract*—This paper reports on distant consciousness-device experiments performed as a long-range signal transmission between spatially separated human-'transmitters' and device-'receivers'. These experiments have been conducted between 2015 and 2019 with operators from the USA, Canada, Europe, Russia, China, Argentina, and include several series of web-based, youtube-based and public-audience-based attempts. Signals on the receiver side are detected by electrochemical impedance spectroscopy (EIS) of water-containing systems and biological reaction of plant organisms. They are displayed as real-time html plots streamed in internet and represent a remote feedback. Local feedback is provided by EEG data available for operators also in real time. Distance between operators and EIS devices varies between 10^1 to 10^6 meters. Combination of remote EIS and local EEG feedbacks enables controllable conditions for operators and contributes to achieving well-repeatable outcomes. Experiments**

generated by various entropic, electromagnetic or even mechanical processes [7]. In fact, high-resolution AC/DC conductometry and EIS spectroscopy have become standard methods for analyzing such weak phenomena. There are several variants of corresponding methods/devices, such as measuring the relative dispersion of conductivity [8], analyzing the DC-current-conductivity with Zenin/Bobrov detectors [9], [7], detector on deeply polarized electrodes [10], contactless measurement of conductivity [11] and differential EIS [12]. Conductometric systems were used for testing human operators, for example, the two-channel system developed by Dr. Bobrov was used by the KGB and USSR's Ministry of Defence in 80s and 90s [13]. The fact of involving the 'consciousness-consciousness' and 'consciousness-device' approaches into the defence and anti-

in publication

https://www.aquapsy.com

Suchen

AquaPsy | Home | My Sessions | Experiments | Trainings (beta) | 14.5.2019, 11:33:41 UTC | Sign In | Sign Up

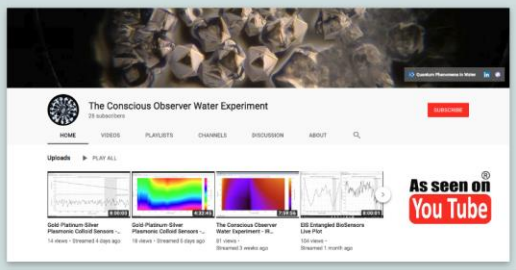
www.aquapsy.com

Non-local Mind Effect

Exploring Consciousness Using Water Based Sensors

Is it possible to measure the effect of a large group of people concentrating on the same object?

JOIN NOW



The Conscious Observer Water Experiment

Researcher: Jeremy Pfeiffer

Welcome to your exclusive private session!

Start Date:	Duration:	
May 12, 2019 at 05:00PM UTC	30 mins	1

VIEW

Caclulating score of remote mental impact

Researcher: Serge

Example of scores from morning session 02.04.19 (and approach for thier cal

Start Date:	Duration:	
April 2, 2019 at 08:27AM UTC	30 mins	0

VIEW

Results

Early: 1989-2013

1 period: 2016-2017

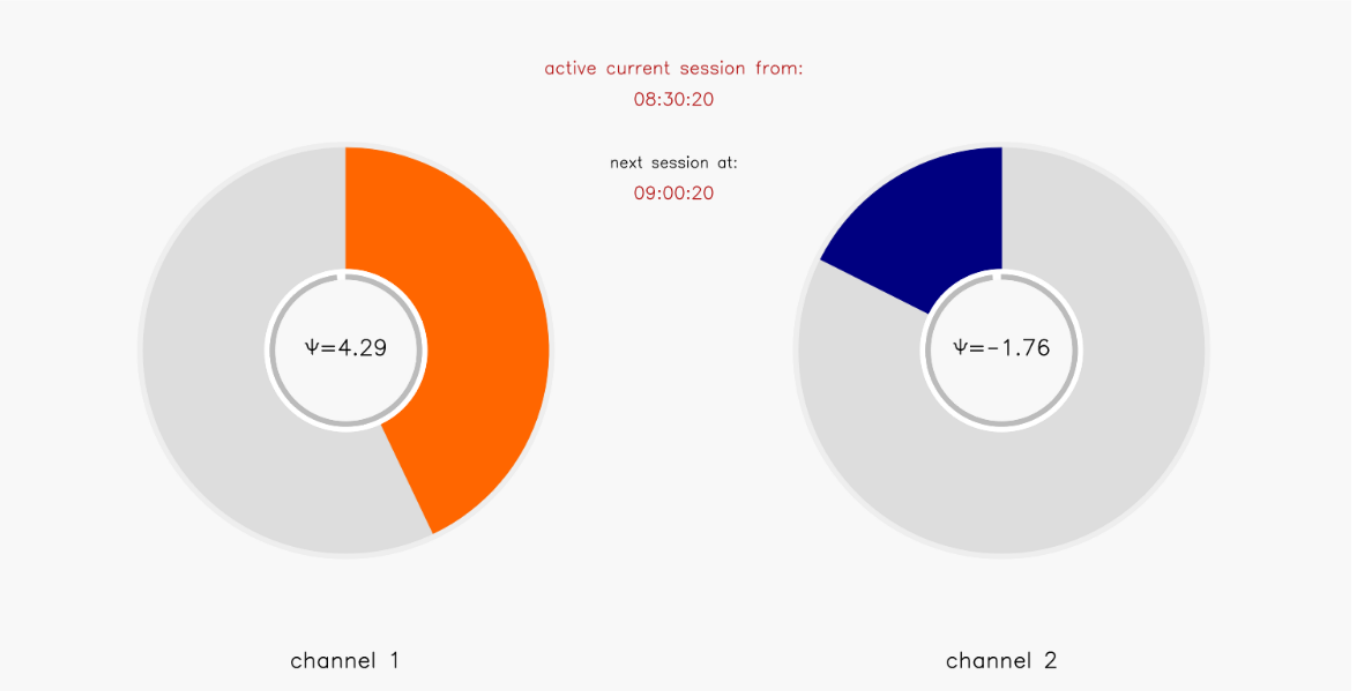
2 period: 2018-2019

Overview of some results with M.I.N.D. technology

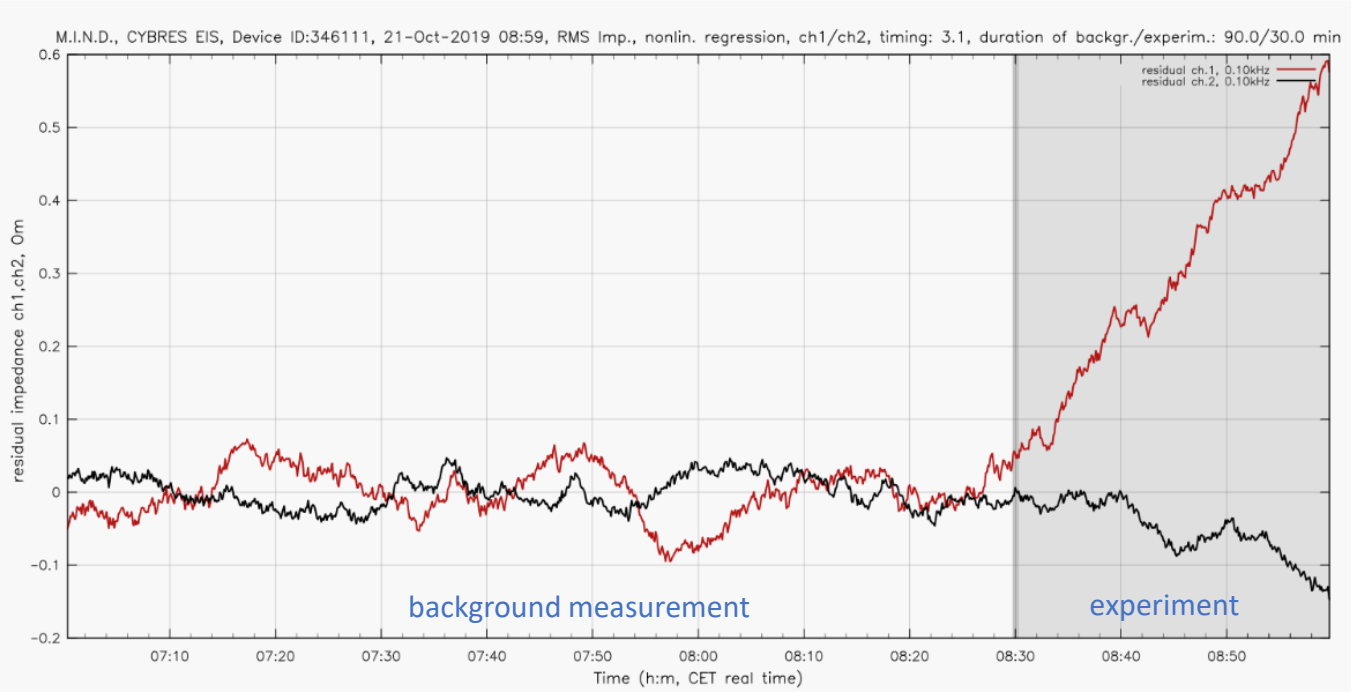
Tests/ processing	local, manual (A.V.Bobrov) 1989-1991	local, manual 2012-2013	web, manual Sept.2016-Jan.2017	web, automated 2018-2019	web, automated AquaPsy.com
N of attempts, statistical significance	? yes	20-30, no	50-70, yes	>300, yes	no (in progress)
% of success	classified/ unknown (high)	69%-92%	74%	up to 96% (training)	---
published	partially, book, reports	conferences + journal, yes	conferences, j. in progress	in progress	in progress

- environment produces the “same signals”
- thermodynamic issues
- training of healers, group of Reiki practitioners
- exploration of altered states of consciousness (stress therapy, Yoga, meditations)

Overview of results



Real-time feedback: it works!



Overview of results: comparison of random and active sessions

VALUES OF FACTORS A, B, AND C IN DIFFERENT CASES.

fac-tor	simul. random (RNG)	real random (EIS)	maxi-mal (EIS)	public June 2019	public Septem. 2019
A	1.04	1.04	2.36	1.96	1.91
B	2.64^{4}	9.55^{-2}	2.82^{-26}	4.12^{-20}	4.82^{-19}
C	445	422	0	12	80

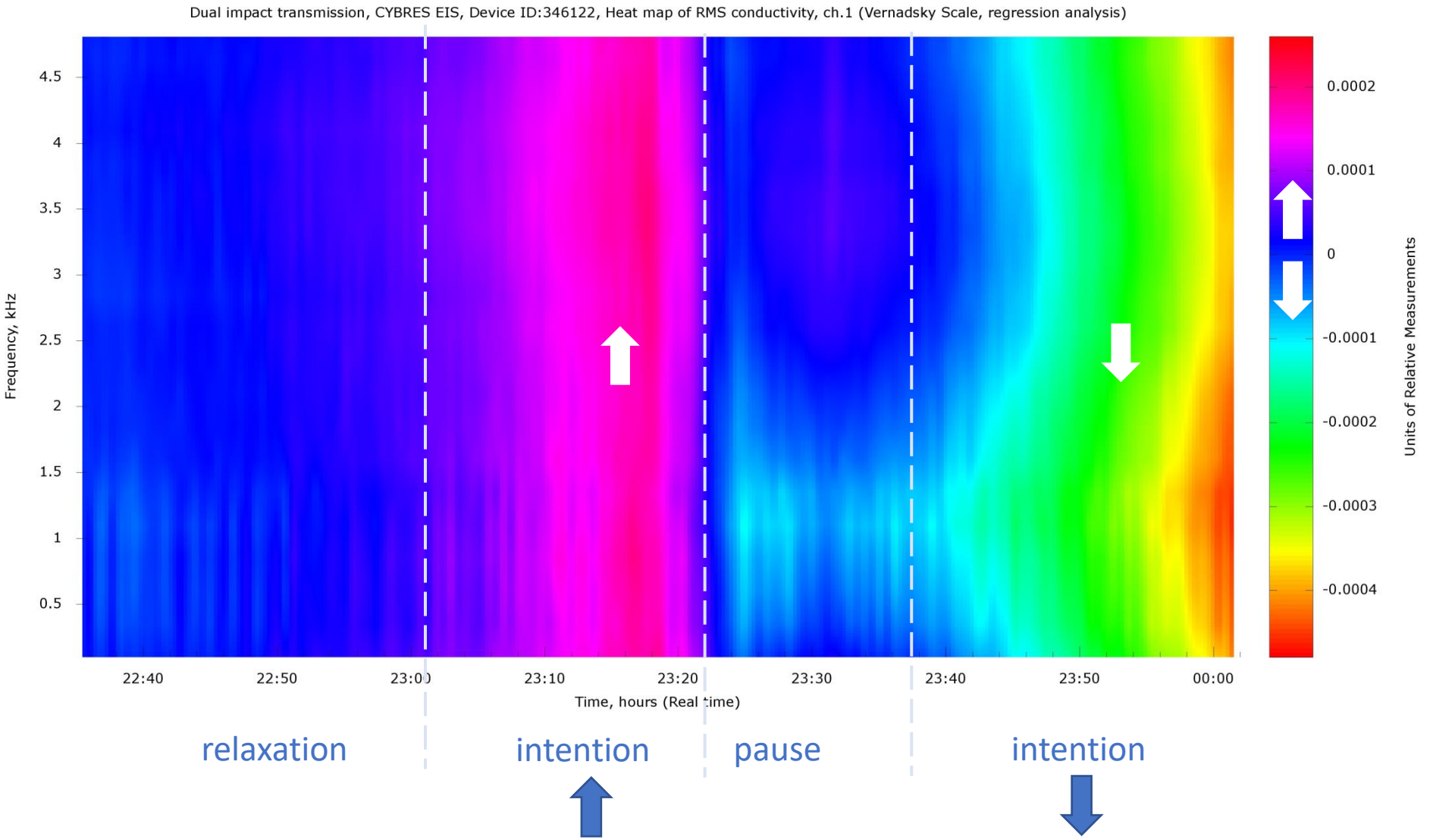
mean intensity

probabilistics

Mann-Whitney test

Essential differences between random sessions and active sessions

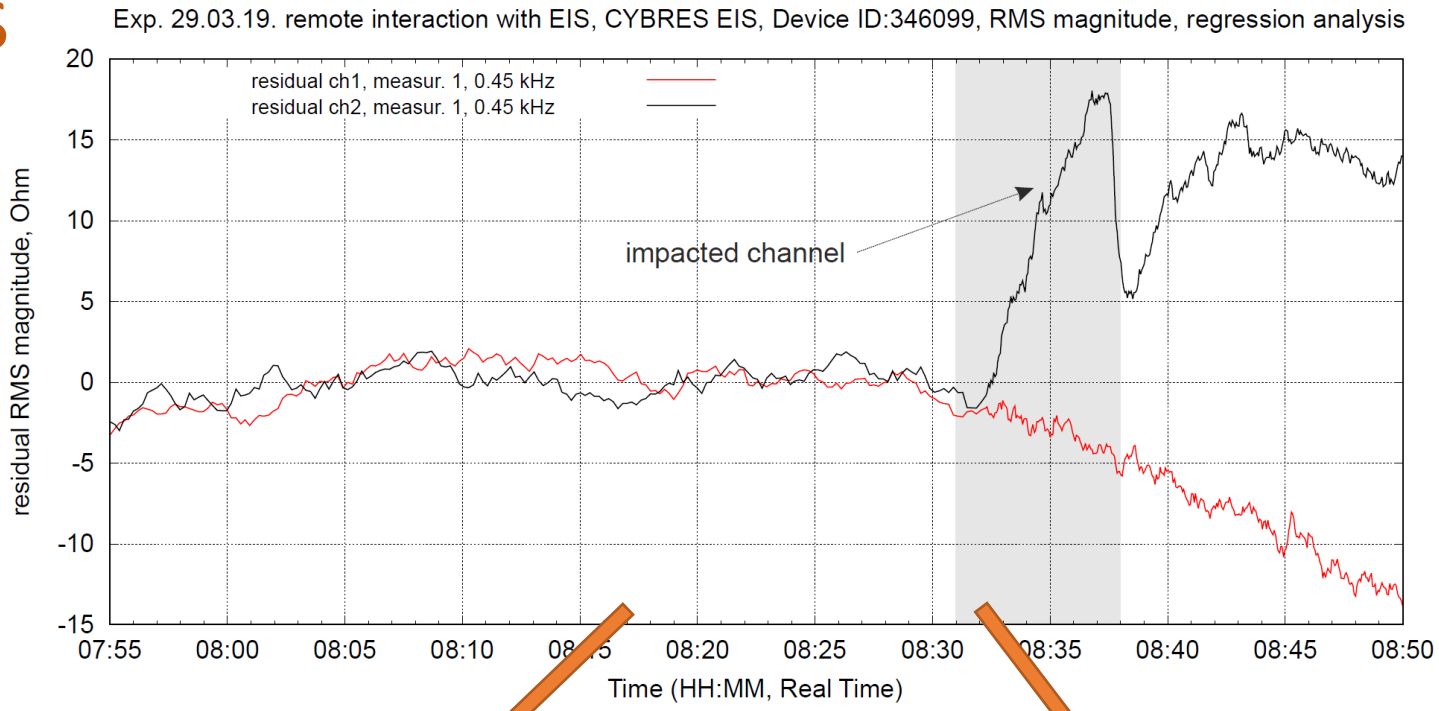
Dual impact transmission with M.I.N.D. technology



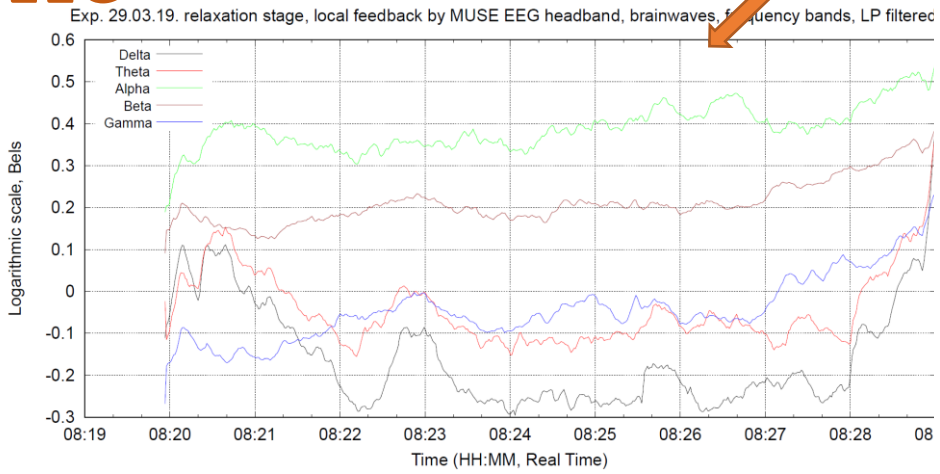
possible explanation for the effects of experimenter/sceptic

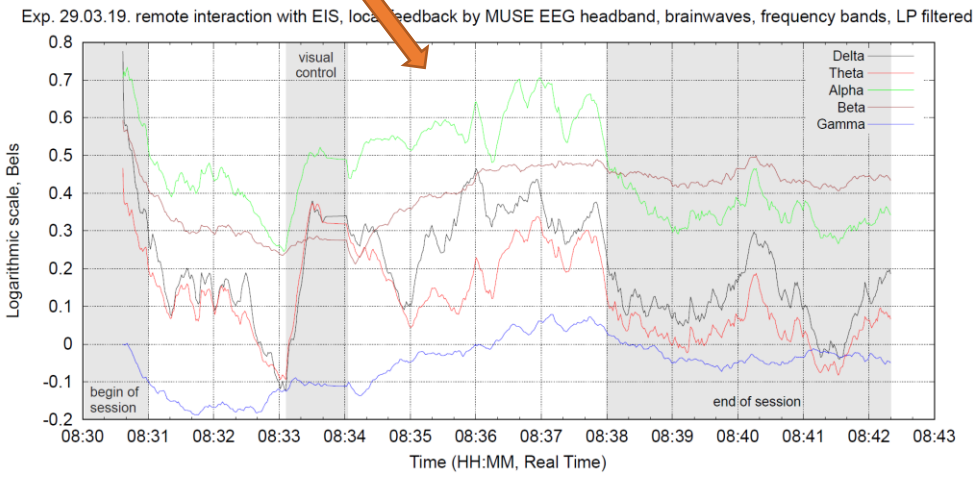
EEG data: remote session – a kind of “active meditation”

EIS



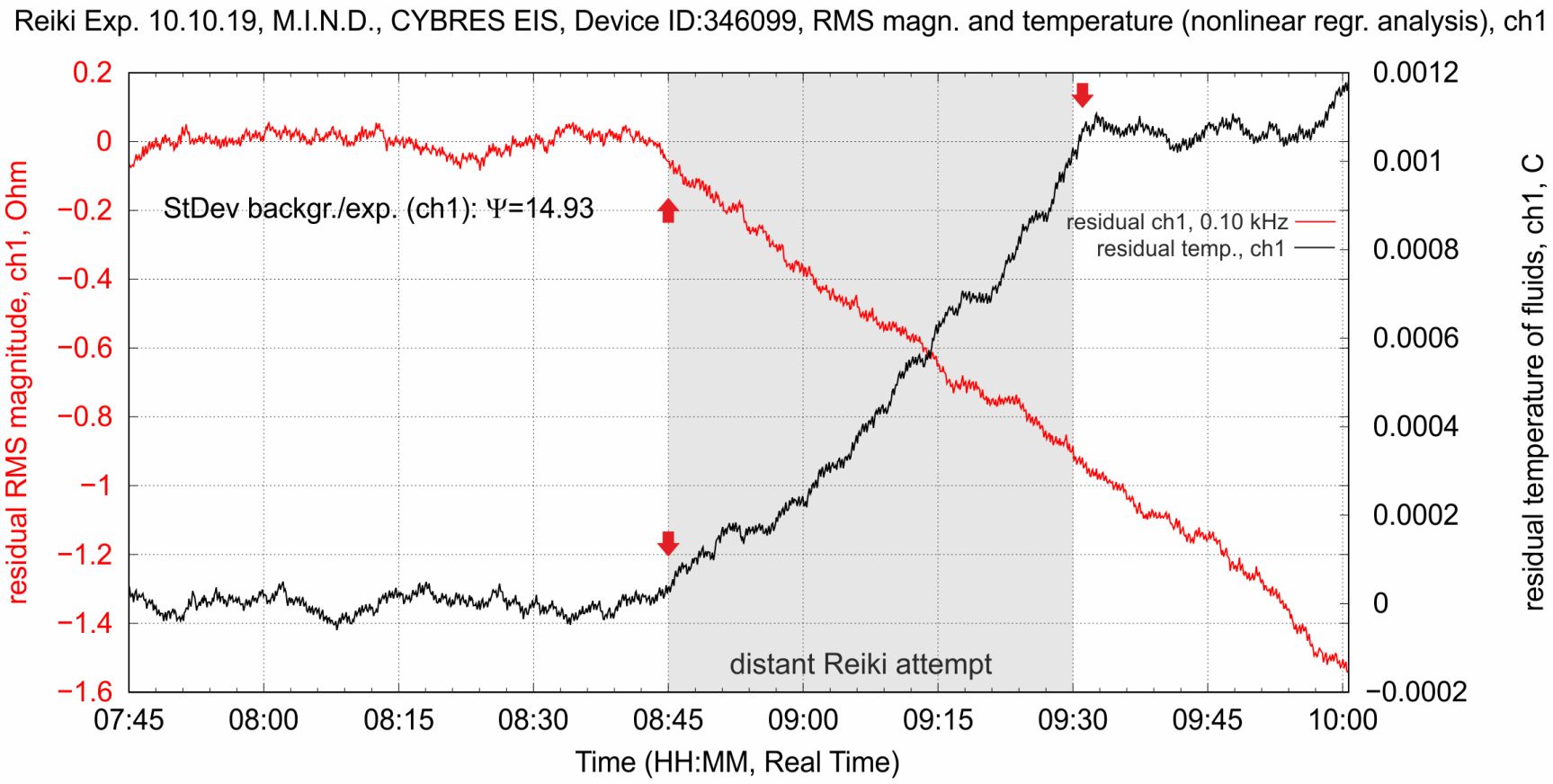
EEG





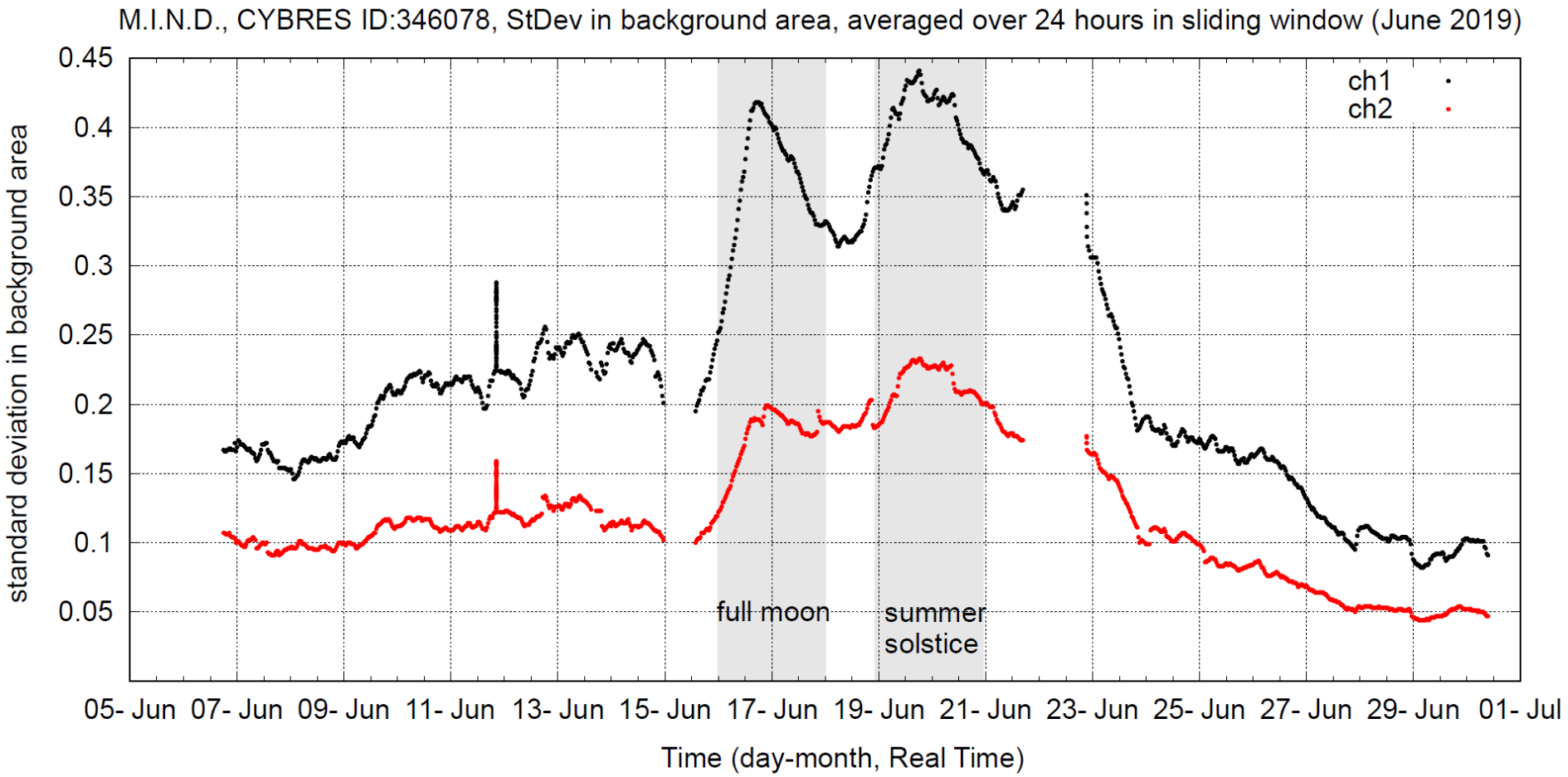
excited dynamics of all EEG rhythms – “active meditation”

Remote attempts: influencing a thermodynamics conditions?



electrochemical reactions can produce/consume of few eV of energy

Impact of environment



MIND sensor without public access, June 2019, shown is the standard deviation in background region, averaged in a sliding window of 24 hours. The first peak coincides with the full moon on June 17 and the second peak on June 21 – with the summer solstice.

Environment has many “distant signals” of a similar nature

Conclusion

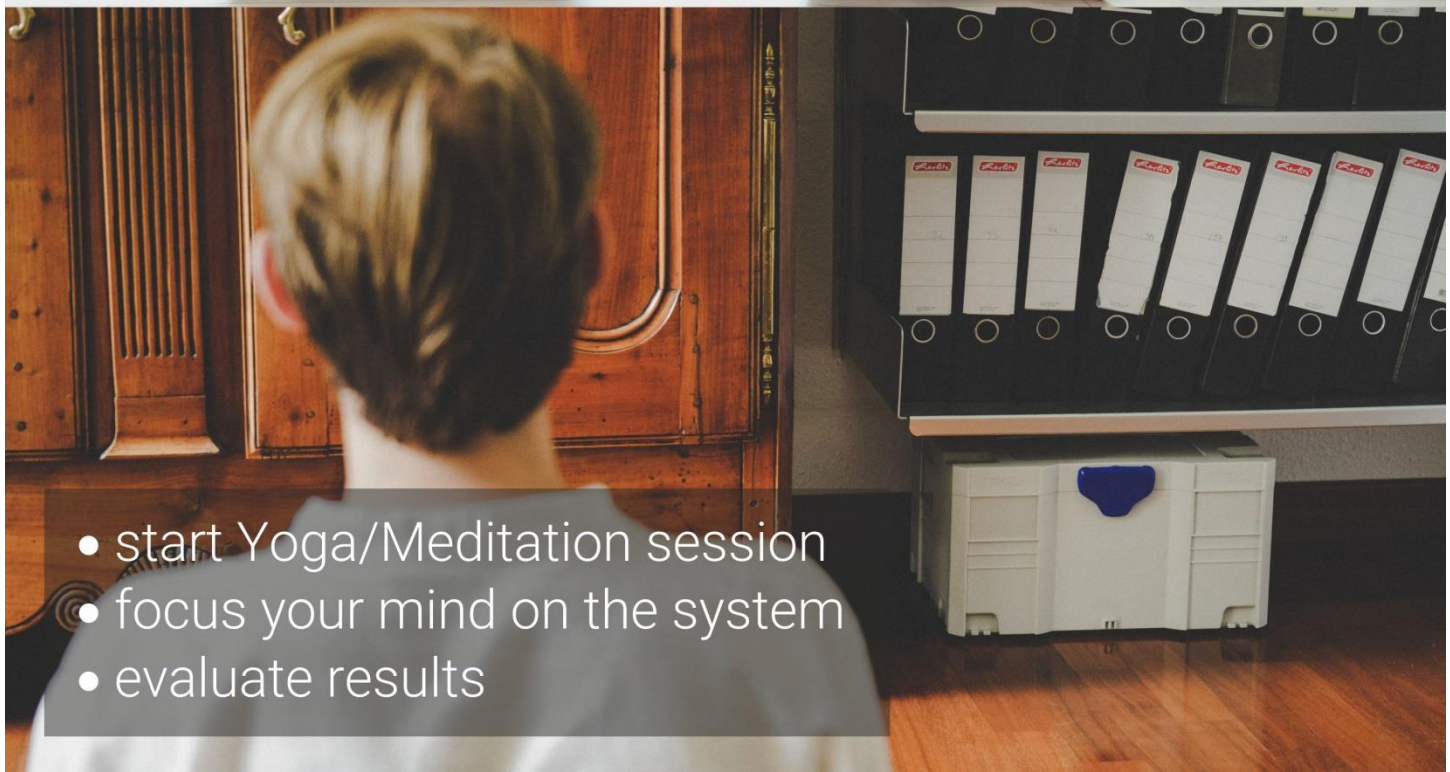
Conclusion

1. EIS is enabling technology for detection and characterization of non-chemical treatment in many areas (based on ionic dynamics and statistical/numerical calculations)
2. “Weak influences” from different sources (also from consciousness) are measurable with statistical significance.
3. A lot of applications (healers, Reiki, Yoga, advanced mediations) and implications (environment, thermodynamics, …)

4. Available on the market

Applications

anti-stress therapy



Applications

training
of healers,
self-healing,
distant
treatments,
self-
development

Conclusion

1) Collective AquaPsy experiments with real-time feedback with Anton Fedorenko and Jeremy Pfeiffer on 24-26.10.09, see AquaPsy.com, at 9.00pm CET every day during the conference, (see also a poster about AquaPsy web-platform)

2) Regular web-seminars on EIS/infoceuticals/MIND topics (monthly), info: serge.kernbach@cybertronica.co

Thank you