

Email subrena.harris@npl.co.uk to receive email updates of the latest newsletter and upcoming Measuring the Impossible Network (MINET) events.

FORTHCOMING MINET EVENTS

MINET Workshop 2

**“Awareness, perception and interpretation:
Measurements vis-à-vis the complexity of life”**

8 - 9 October 2008, Rome, Italy

MINET workshops aim to promote a deeper and wider understanding of the themes under investigation in the Measuring the Impossible (Mtl) field. They are a valuable opportunity for exchange of knowledge among researchers with an interest in this topic, and especially between the various [projects](#) funded under the EU New and Emerging Science and Technology (NEST) Mtl programme.

All [Mtl projects](#) entail the investigation and measurement of complex phenomena that involve human beings as objects of study or as measuring instruments. They require the scientific study of topics such as haptic, visual or auditory perception, emotions, the mind-brain relationship, differences among individuals, quality of environments, products and services, and pose a set of remarkable challenges to scientists.

It is expected that each project funded under the EU NEST Mtl programme will contribute to the Workshop with a presentation of their progress and results achieved so far.

The workshop is open to all to attend, to learn more about the Measuring the Impossible projects and to participate in discussions.

Registration

Registration is free of charge.

The final deadline for registration is September 15th, 2008

For further information on Workshop 2 and to register, please visit the MINET website at:

<http://www.measuringimpossible.net/events/workshop2/>

MINET Think Tank C

“Measurement uncertainty when measuring the impossible”

9 - 10 October 2008, Rome, Italy

This is the third in a series of four meetings organised within the framework of the MINET, each of which provides a forum for discussion of topics of interest to all Mtl projects. This particular event will focus on a crucial topic for measurement in general and especially for Mtl, i.e., how to detect, determine and express uncertainty. Understanding of uncertainty is a generic requirement across physical, psychological and social measurements and is the expression of an increasing convergence between the so-called ‘hard’ and ‘soft’ sciences, yet it is not often treated with the necessary awareness.

The Think Tank Event will be an occasion for dialogue and interdisciplinary scientific communication between the metrological community - which has championed the issue of uncertainty for years - and scientists engaged in other scientific disciplines in the various Mtl application fields. It will involve discussions in plenum, working groups, and a shared reflection on the basis of the insights presented in an educational lecture by a scholar in this field.

Summary programme

9 October 2008: Afternoon (2.30pm – 5.00 pm)

- Introduction to the Think Tank Event C
- Educational Lecture:

LEONARDO CANNAVÒ, University “La Sapienza” of Rome: *‘Uncertain Measures? A Comparison between Causal and Systemic Sciences from the Viewpoint of an Applied Methodologist’*

- Discussions in plenum

10 October 2008: Morning (9.00am – 1.00pm)

- Introduction to discussion groups
- Breakout discussion groups
- Group reports and discussions
- Conclusions

Registration

Registration is free of charge.

The final deadline for registration is September 15th, 2008.

Further information on the Think Tank Event C, including registration details, is available on the MINET project website:

<http://www.measuringimpossible.net/events/thinktank/>

Future Events

Measuring Behaviour Conference	26-29 August 2008
IMEKO Conference on Man, Science and Measurement	3-5 September 2008
MINET Workshop 2	8-9 October 2008
MINET Think Tank C	9-10 October 2008
Newsletter 4	Winter 2009
Computer-Human Interaction Conference	April 2009

Training Course

MINET

Theory and Methods of Measurements with Persons

The MINET Training Course 'Theory and methods of measurements with persons' took place at the Palazzo del Principe, Genova, Italy from 9-11 June 2008.

The course was aimed at senior researchers. It was a great success, attracting 66 attendees, far more than expected. The attendees came from 14 different countries, including some from outside Europe.

The 19 lectures were presented by experts in the various fields of scientific research of relevance for Mtl projects, and researchers from the FUGA (Fun of Gaming) project set up a demonstration that gave attendees the opportunity to gain some practical experience.



Attendees enjoying lunch

There was a broad mix of attendees, with approximately half coming from Measuring the Impossible projects and the rest being researchers and students from relevant scientific disciplines. Nine different Mtl projects were represented in total. The programme included a general theoretical and methodological section, giving important background across a range of topics, and a section where selected application areas were presented, such as sound perception.



Training course lecture

Despite having a very diverse range of backgrounds (including engineering psychology, physical metrology, psychophysics and biology), the audience appreciated the lecture quality, and found the course relevant to their current (or planned) research activities.

Two highly enjoyable evening social events took place. The first was a dinner in the old port area of Genova, and the second was a concert and a tour of and dinner in the XVI century Palace.



Some of the training course participants



Evening concert at the Palazzo del Principe

The [presentations](#) given at the training course will be made available on the MINET website soon. To gain access you must be registered as a member of the [e-MINET](#) network.

FORTHCOMING CONFERENCES



Measuring Behavior 2008 Conference

MINET have organised a symposium within this conference at which some of the Measuring the Impossible (Mtl) projects will be presented.

Symposium: Measuring the Impossible; An EU New and Emerging Science and Technologies (NEST) initiative

09:30 – 12:15 pm, 29 August 2008

Chair: G. van der Heijden (Wageningen University, Wageningen, The Netherlands)

Programme:

- MINET – A European Network on Measuring the Impossible
M. Gröning. **Project: MINET**
- Measuring perceived odour quality
L. Zheng. **Project: SysPAQ**
- Focal attention models driven by image statistics
J-M Geusebroek, V. Yanulevskaya, J. B. Marsman, F. Cornelissen. **Project: PERCEPT**
- Measuring perception of Naturalness
K.E. Overvliet, S. Soto-Faraco, T.A. Whitaker, L. Johnstone-Sorensen, F. McGlone, and G. van der Heijden. **Project: MONAT**
- Measuring the experience of digital game enjoyment
W. I. Jsselsteijn. **Project: FUGA**
- Measuring conscious mental states
M. Overgaard, K. Sandberg, B. Timmermans and A. Cleeremans. **Project: MindBridge**
- MEMORY: Measuring the relationship between perception of space and time
G. M. Cicchini, P. Binda, D. Burr and M. C. Morrone. **Project: MEMORY**

See the MINET website for further information on the Measuring Behavior Conference:

<http://www.measuringimpossible.net/events/measuringbehavior2008/>



IMEKO Conference on Man, Science and Measurement

The IMEKO conference on Man, Science and Measurement contains three sessions related to MINET topics: "Subjectivity", "Human Measurement" and "Non-physical Measurements". Please refer to the conference programme for details of the dates and times of these sessions.

There will be four contributions to this congress from 'Measuring the Impossible' project teams, taking place in different sessions within the congress. They are:

- A wireless sensor networks platform for modelling space perception during saccadic eye-movements
P. Binda, M. Cicchini, S. Giordano, M. C. Morrone, A. Puiatti.
Project: MEMORY
- The Measurement of Naturalness (MONAT)
T. Goodman, R. Montgomery, A. Bialek, A. Forbes, M. Rides, T. A. Whitaker, K. Overvliet, F. McGlone, G. van der Heijden
Project: MONAT
- On some key concepts and terms in measurement having a cross-disciplinary impact
G. B. Rossi
Project: MINET
- Measurement of perceived sound intensity accounting for individual differences
F. Crenna, M. Panero, G. B. Rossi
Project: MINET

See the MINET website for further information on the IMEKO conference:

<http://www.measuringimpossible.net/events/imeko2008/>

NEWS FROM Mtl PROJECTS

MINET Study Visits

MINET incorporates a series of study visits between researchers in Mtl projects, so as to meet the aim of the MINET project to achieve a long-term integration and advancement of interdisciplinary research and novel investigative methods in Europe.

The first round of study visits has now taken place, and the second call for proposals has now been completed, with decisions on successful proposals due in July 2008. A third round of study visits is planned for 2009 and a call for these will be made towards the end of 2008.

Three successful study visits took place between October 2007 and May 2008. Each participant reported to have gained an insight into the research of the others within their study visit groups. The visits also stimulated new ideas for possible future collaborative research projects.

Verona – Paris, October 2007

Topic: Use of instrumentation for touch measurements

Visiting scientists: University of Verona, Project team: *CLOSED*

Hosting scientists: CNRS Laboratoire de Physique Statistique, Paris, Project team: *MONAT*

Borås – Copenhagen, February 2008

Topic: Perception of indoor environment, (thermal) comfort in conjunction with energy efficiency

Visiting scientists: SP Technical Research Institute of Sweden, Borås, Project team: *MINET*

Hosting scientists:

- Technical University of Denmark (DTU), Lyngby, Project team: *SysPAQ*
- SBI Danish Building Research Institute, Denmark

Zurich – Paris, April 2008

Topic: Investigative methods for sound evaluation

Visiting scientists: ZHdK University of Applied Arts and Sciences, Zurich, Project team: *CLOSED*

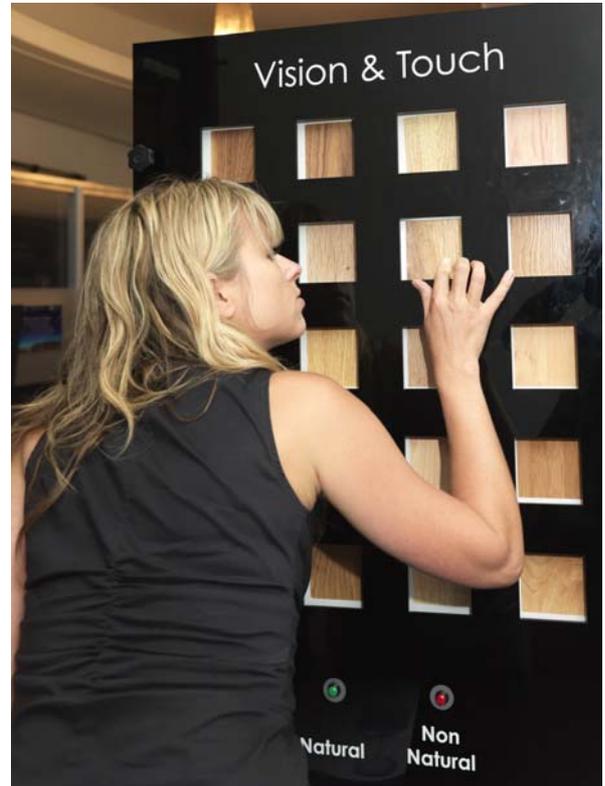
Hosting scientists: Ircam, Perception and Sound Design team, Paris, Project team: *CLOSED*

More information on study visits is available from: <http://lesliependrill.wordpress.com/minet-wp3-study-visits-programme/>

Reports on completed MINET study visits may be found at: <http://lesliependrill.wordpress.com/minet-wp3-study-visits-programme/1st-call-minet-study-visit-reports/>

Is it Natural? – The physics of perception

NPL represented the MONAT project team with a stand on the 'Physics of Perception', at the Royal Society Summer Exhibition, held in London from 30 June to 3 July 2008. This event attracted a large number of visitors from different backgrounds, including school children, the media, academics, politicians & the general public.



A visitor taking part in the visual and touch assessment of natural and synthetic wood materials

The NPL stand included a number of interactive demonstrations, such as an optical chequerboard illusion and a size-weight illusion involving placing a set of wooden dolls in order of weight. Visitors were also invited to take part in a controlled psychophysical experiment, involving evaluating wood and wood effect samples in terms of their perceived naturalness, based on either a visual-only or a combined visual and touch assessment. Participants received a certificate on completion of the test, recording how many samples they had correctly identified as natural or synthetic. Results from these trials were recorded at the stand and will be analysed at NPL, to supplement data being collected during the MONAT project itself relating to the visual and tactile perception of natural and synthetic wood samples. Visitors proved to be quite competitive, being determined to see if their scores on the visual test could be improved by adding touch as well. Over 1000 sets of results were recorded over the course of the 4-day exhibition.

For more information on the exhibit please visit: <http://summerscience.org.uk/index.php?q=node/57>

or e-mail [Ruth Montgomery](mailto:Ruth.Montgomery@npl.ac.uk) at NPL

Music is tuning the brains of musicians and non-musicians

The [BrainTuning](#) project aims to systematically reveal the subsequent and multidimensional stages of the brain functions that enable us to perceive, perform, and enjoy musical material.

Braintuning researchers have recently made strong contributions to two key international conferences in the field of Braintuning research.

At **Neurosciences and Music III**, Montréal, Canada, 25-28 June, Dr. Tervaniemi presented her talk discussing the similarities and differences between the brains of musicians of different genres, Dr. Saccuman showed interesting neonatal brain responses to musical sounds in her talk, and Dr. Brattico talked about the subjective appreciation of music in the light of neuroimaging evidence. In addition to the talks, several Braintuning researchers presented posters in the meeting.

At the **International Conference of Music Perception and Cognition (ICMPC)**, which will be held in August 2008, in Japan, Drs. Bjurling and Bresin from Stockholm will present their work on timing in piano music, Drs. Bresin and Friberg will discuss the influence of acoustic cues on the expressive performance of music, Dr. Brattico from Helsinki will present her work on brain oscillations in orchestral musicians and also the aesthetic evaluations of music, Mr. Hansen and Dr. Bresin will present their work on verbal descriptions of DJ recordings, Ms. Müller will show electrophysiological responses from aesthetic evaluation conditions, and Ms. Istok will discuss timing cues in music performances with her collaborators.



Braintuning researchers are also actively presenting their work in scientific journals, both nationally and internationally. For example, Drs. Brattico, E., Brattico, P., & Jacobsen, are publishing their paper entitled "The origins of the aesthetic enjoyment of music – A review of the literature" in **Musicae Scientiae**.

The MIR toolbox, which is a **Matlab toolbox** for Music Information Retrieval developed mainly by Dr. Lartillot, has received a lot of interest and new users when the toolbox has been presented in conferences like for example in the 31st Annual Conference of the German Classification Society in Freiburg, Germany, and at the International Conference on Music Information Retrieval in Vienna, Austria.

Professor Rossi, invited plenary speaker at the AMCTM Conference, June 2008

Professor Giovanni Battista Rossi was invited to give an invited plenary talk on "Measurement of characteristics related to human perception" at the recent AMCTM Conference in Paris, www.cfmetrologie.com/amctm08.php

The conference on advanced mathematic and computational tools in metrology and testing was the VIII AMCTM Conference, and was organised jointly by the Collège Français de Métrologie (www.cfmetrologie.com) and IMEKO TC21 (www.imeko.org).

The main theme of this conference was to provide a central opportunity for the metrology and testing community worldwide to engage with applied mathematicians, statisticians and the software engineers working in the relevant fields, which was a great opportunity that Professor Rossi took to mention the activities of MINET to a new audience.

For More Information

For further information on MINET activities or on any of the EU NEST Measuring the Impossible projects, please visit the MINET website:

<http://www.measuringimpossible.net>