

Inaugural JULESZ LECTURE

on BRAIN RESEARCH

Wed, April 20 2011 at 5 pm
Main Auditorium, UMDNJ, Piscataway,
NJ

[Directions](#)

(search for building 2 on the map)

1./ Tribute to Béla Julesz by
President R. L. McCormick

2./ [Nikos Logothetis](#)

Director of the Department "Physiology of
 Cognitive Processes"

Max Planck Institute for Biological
 Cybernetics, Tübingen, Germany

**"MRI Signals: Myth and Reality –
 What we can and cannot do with fMRI"**

ABSTRACT: Our current knowledge of cortical microcircuits, inhibition, neuromodulation, and glia cell activity suggests that fMRI can be used as an excellent tool for formulating intelligent, data-based hypotheses, but only in certain special cases can it be useful for unambiguously selecting one of them, or for explaining the detailed neural mechanisms underlying the studied cognitive capacities. In the vast majority of cases, it is the combination of fMRI with other techniques and the parallel use of animal models that will be the most effective strategy for understanding brain function. In my talk, I'll summarize what we have learned from physiology, pharmacology, microstimulation and fMRI experiments and discuss the extent to which the BOLD fMRI signal reflects local changes in neural activity.

Readings

[Logothetis: What we can do and what we cannot do with fMRI](#)



Béla Julesz (1928 -2003)

- State of NJ Prof. (Rutgers Psych)
- US National Academy of Sciences
- Heineken Prize, Dutch Academy
- MacArthur "Genius" Award
- Julesz's Foundations of Cyclopean Perception was selected among the top 100 influential works on cognitive science in 20th century

Reception with food and drinks
to follow.

To RSVP or ask for directions please

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Name*:

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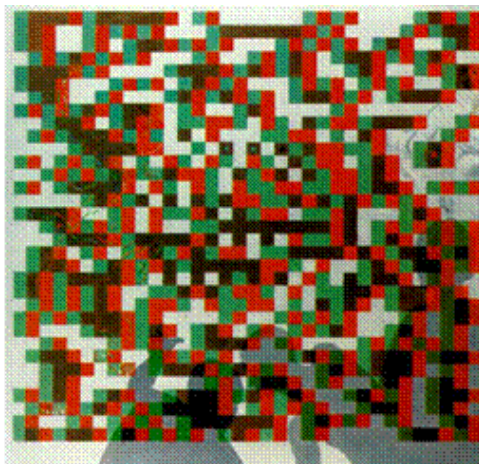
We need to plan in advance!!

Organizing Committee: T.V. Papatomas, E. Kowler, B. Tesar, G. Buzsaki, B.P. Mclaughlin. T. Shinbrot

[Petrig, Julesz et al.: Stereopsis and Cortical Binocularity in Human Infants - VEP study](#)



Nikos Logothetis's "Ambiguous Room" (2003)



Salvador Dalí's "Cybernetic Odalisque – Homage to Béla Julesz" (1978)

Best seen with red-green glasses.

For an online tax-deductible donation to the Bela Julesz Lecture Fund, please read the text below and then click on the "DONATE" button.

We have started a fund to continue the Julesz Lecture on a regular biannual basis. When you press the "DONATE" button below, you will be re-directed to the Rutgers Foundation Secure Online Donation Form. Make sure you specify "**0-39333 Conf Bela Julesz**" in the box under "Would you like to support a fund not listed above..." Please check if your company will match your donation.



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