

## COLOR VISION

### Color Vision: Introduction

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- Steven Buck, Rigmor Baraas, Barry Lee, Delwin Lindsey, Michael Webster, and John S. Werner  
**Verriest lecture**

### The Verriest Lecture: Color lessons from space, time and motion



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- Steven K. Shevell

#### Color sensitivity and appearance

### Individual differences in simultaneous color constancy are related to working memory



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- Elizabeth C. Allen, Sian L. Beilock, and Steven K. Shevell

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- David Bimler

### Role of eye movements in chromatic induction



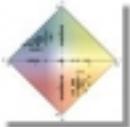
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- Jeroen J. M. Granzier, Matteo Toscani, and Karl R. Gegenfurtner

### Feature binding of a continuously changing object



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## Do color appearance judgments interfere with detection of small threshold stimuli?



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- JOSA A Vol. 29, Iss. 2, pp. A258–A267 (2012)
- Darren E. Koenig and Heidi J. Hofer

## The perceptual balance of color



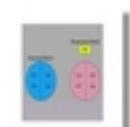
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- Kyle C. McDermott and Michael A. Webster

## Tests of a functional account of the Abney effect



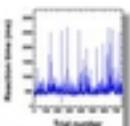
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- Sean F. O'Neil, Kyle C. McDermott, Yoko Mizokami, John S. Werner, Michael A. Crognale, and Michael A. Webster

## Quantal and non-quantal color matches: failure of Grassmann's laws at short wavelengths



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- Joel Pokorny, Vivianne C. Smith, and Jun Xu

## 1/f noise in human color vision: the role of S-cone signals



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- José M. Medina and José A. Díaz

## A three-dimensional color space from the 13th century



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- Hannah E. Smithson, Greti Dinkova-Bruun, Giles E. M. Gasper, Mike Huxtable, Tom C. B. McLeish, and Cecilia Panti

## **Chromatic discrimination**

### **Hue discrimination, unique hues and naming**

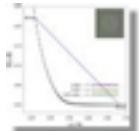


- [Abstract](#) | Full Text: [PDF](#) (501 KB)
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  - Romain Bachi, Jérôme Dias, David Alleysson, and Valérie Bonnardel
- Chromatic discrimination: differential contributions from two adapting fields**



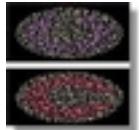
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- Dingcai Cao and Yolanda H. Lu

### **Cardinal axes are not independent in color discrimination**



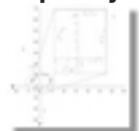
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### **Color discrimination across four life decades assessed by the Cambridge Colour Test**



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### **Influence of the correlated color temperature of a light source on the color discrimination capacity of the observer**



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- Pedro J. Pardo, Eduardo M. Cordero, María Isabel Suero, and Ángel L. Pérez

### **Color in natural or complex scenes**

#### **Visual search in natural scenes explained by local color properties**



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- Kinjiro Amano, David H. Foster, Matthew S. Mould, and John P. Oakley

## Predicting frequency of metamerism in natural scenes by entropy of colors



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- Gaoyang Feng and David H. Foster

## Systematic violations of von Kries rule reveal its limitations for explaining color and lightness constancy



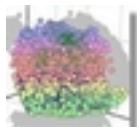
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- Janus J. Kulikowski, Ausra Daugirdiene, Athanasios Panorgias, Rytis Stanikunas, Henrikas Vaitkevicius, and Ian J. Murray

## Context-dependent judgments of color that might allow color constancy in scenes with multiple regions of illumination



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- R. J. Lee and H. E. Smithson

## A chromatic diversity index based on complex scenes



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- João Manuel Maciel Linhares and Sérgio Miguel Cardoso Nascimento

## Uniform color spaces and natural image statistics



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## Effect of spatial structure on colorfulness adaptation for natural images



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- Yoko Mizokami, Chie Kamesaki, Nobuki Ito, Shun Sakaibara, and Hirohisa Yaguchi

## Are Gaussian spectra a viable perceptual assumption in color appearance?



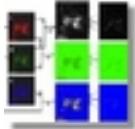
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- Yoko Mizokami and Michael A. Webster

### Psychophysical optimization of lighting spectra for naturalness, preference, and chromatic diversity



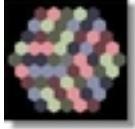
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- Sérgio M. C. Nascimento and Osamu Masuda

### Contrast edge colors under different natural illuminations



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- Juan Luis Nieves, Sérgio M. C. Nascimento, and Javier Romero

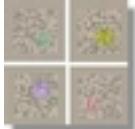
### Estimating illuminant color based on luminance balance of surfaces



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- Keiji Uchikawa, Kazuho Fukuda, Yusuke Kitazawa, and Donald I. A. MacLeod

### Mesopic and peripheral color vision

#### Changes in color vision with decreasing light level: separating the effects of normal aging from disease



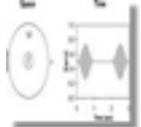
- [Abstract](#) | Full Text: [PDF](#) (726 KB)
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- John L. Barbur and Evgenia Konstantakopoulou

### Rod hue biases produced on CRT displays



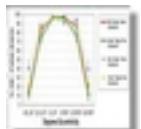
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- JOSA A Vol. 29, Iss. 2, pp. A36–A43 (2012)
- Steven L. Buck, Ryan Juve, David Wisner, and Aldebert Concepcion

## Lateral suppression of mesopic rod and cone flicker detection



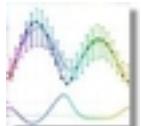
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## A tritan Waldo would be easier to detect in the periphery than a red/green one: evidence from visual search



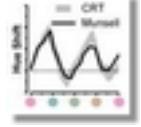
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- Rob N. Dalhaus and Karen L. Gunther

## The relationship between peripherally matched invariant hues and unique hues: a cone-contrast approach



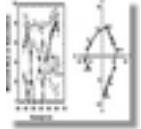
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- JOSA A Vol. 29, Iss. 2, pp. A233–A239 (2012)
- Athanasios Panorgias, Janus J. Kulikowski, Neil R. A. Parry, Declan J. McKeefry, and Ian J. Murray

## Real-world stimuli show perceived hue shifts in the peripheral visual field



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## Color appearance at $\pm 10^\circ$ along the vertical and horizontal meridians



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- Vicki J. Volbrecht and Janice L. Nerger

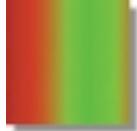
## Mesopic rod and S-cone interactions revealed by modulation thresholds



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- Andrew J. Zele, Jan Kremers, and Beatrix Feigl

## Retinal and cortical color processing

### Psychophysical and physiological responses to gratings with luminance and chromatic components of different spatial frequencies



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- Bonnie Cooper, Hao Sun, and Barry B. Lee

### Contrast adaptation reveals increased organizational complexity of chromatic processing in the visual evoked potential



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- Chad S. Duncan, Eric J. Roth, Yoko Mizokami, Kyle C. McDermott, and Michael A. Croganale

### Effect of luminosity on color discrimination of dichromatic marmosets (*Callithrix jacchus*)



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- Fabio Batista Freitag and Daniel Marques Almeida Pessoa

### Electroretinographic responses to photoreceptor specific sine wave modulation



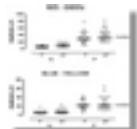
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- Jan Kremers and Gobinda Pargeni

### Spatial distributions of cone inputs to cells of the parvocellular pathway investigated with cone-isolating gratings



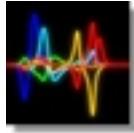
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- Barry B. Lee, Robert M. Shapley, Michael J. Hawken, and Hao Sun

### Chromatic visual evoked potential responses in preschool children



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- Manca Tekavcic Pompe, Branka Stirn Kranjc, and Jelka Breclj

**Domain of metamers exciting intrinsically photosensitive retinal ganglion cells (ipRGCs) and rods**



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- Françoise Viénot, Hans Brettel, Tuong-Vi Dang, and Jean Le Rohellec

**Variations and deficiencies of color vision**

**The Farnsworth Flashlight is not equivalent to the Farnsworth Lantern**



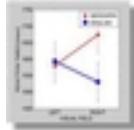
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- Stephen Dain

**Hypoxia, color vision deficiencies, and blood oxygen saturation**



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- Jeffery K. Hovis, Nelda J. Milburn, and Thomas E. Nesthus

**Blue–green color categorization in Mandarin–English speakers**



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- Sophie Wuerger, Kaida Xiao, Dimitris Mylonas, Qingmei Huang, Dimosthenis Karatzas, Emily Hird, and Galina Paramei