# Program

# Saturday, July 19 (Day 1)

9 : 35 –  9 : 45  **Opening remarks**                              *Kagawa International Conference Hall*
Satoshi Shioiri
(Tohoku University, Japan)

9 : 45 – 10 : 45  **Keynote Lecture 1**                          *Kagawa International Conference Hall*

## Artificial retina and visual rehabilitation

Takashi Fujikado
(Osaka University, Japan)
Moderator: Keiji Uchikawa
(Tokyo Institute of Technology, Japan)

10 : 45 – 12 : 15  **Poster 1A**   (Odd Numbers)                                    *Small Hall 2*

12 : 15 – 13 : 15  **Lunch time seminar 1**                              *Conference Room 61*

13 : 30 – 15 : 30  **Talk 1A**   *Visual Cognition*            *Kagawa International Conference Hall*
Moderators: Chien-Chung Chen[1], Makoto Ichikawa[2]
([1]National Taiwan University, Taiwan, [2]Chiba University, Japan)

13 : 30  O1A-1  Two distinct mechanisms underlying facial expression perception
Chien-Chung Chen, Shin-Yin Sheu
(National Taiwan University, Taiwan)

13 : 45  O1A-2  Seeing objects as face enhances object detection
Kohske Takahashi, Katsumi Watanabe
(The University of Tokyo, Japan)

14 : 00  O1A-3  Holistic processing in visual expertise acquisition: An inverted U-shape function in
the development of chinese character recognition
Ricky Van Yip Tso, Terry Kit-fong Au, Janet Hui-wen Hsiao
(The University of Hong Kong, Hong Kong)

14 : 15  O1A-4  Gaze constancy in adults and infants
Yumiko Otsuka[1], Isabelle Mareschal[2], Hiroko Ichikawa[3], So Kanazawa[4],
Masami K Yamaguchi[3], Colin W G Clifford[1]
([1]UNSW Australia, Australia, [2]Queen Mary University of London, UK,
[3]Chuo University, Japan, [4]Japan Women's University, Japan)

14 : 30  O1A-5  The composite effect in static and dynamic familiar face perception
Simone Favelle[1], Alanna Tobin[1], Daniel Piepers[2], Rachel Robbins[2], Darren Burke[3]
([1]University of Wollongong, Australia, [2]University of Western Sydney, Australia,
[3]University of Newcastle, Australia)

14 : 45  O1A-6  Human variation in autistic traits predicts the perception of direct gaze for males, but
not for females
Daisuke Matsuyoshi[1], Kana Kuraguchi[2], Yumiko Tanaka[1], Seina Uchida[1],
Hiroshi Ashida[2], Katsumi Watanabe[1]
([1]The University of Tokyo, Japan, [2]Kyoto University, Japan)

15 : 00  O1A-7  Accurate computation of average attractiveness of faces
Anna Xiao Luo[1], Guomei Zhou[2]
([1]The University of Hong Kong, Hong Kong, [2]Sun Yat-sen University, China)

15 : 15  O1A-8   Effects of viewing time on rightward bias in aesthetic impression formation in viewing pictures

Makoto Ichikawa, Airi Motoki
(Chiba University, Japan)

13 : 30 – 15 : 30  **Talk 1B**  *Color and Light*                                    *Conference Room 61*
Moderators: Sophie Wuerger[1], Keizo Shinomori[2]
([1]University of Liverpool, UK, [2]Kochi University of Technology, Japan)

13 : 30  O1B-1   Aging effects on chromatic discrimination measured by the Cambridge Colour Test
Keizo Shinomori[1], Athanasios Panorgias[2], John S Werner[2]
([1]Kochi University of Technology, Japan, [2]University of California Davis, USA)

13 : 45  O1B-2   Color terms and basic color categories in Mandarin Chinese characters
Vincent C Sun[1], Chien-Chung Chen[2]
([1]Chinese Culture University, Taiwan, [2]National Taiwan University, Taiwan)

14 : 00  O1B-3   Effects of luminance contrast on the color selective responses in macaque V4 and inferior temporal cortex
Tomoyuki Namima[1,2], Masaharu Yasuda[3], Taku Banno[4], Gouki Okazawa[1], Hidehiko Komatsu[1]
([1]National Institute for Physiological Sciences, Japan,
[2]The Graduate University for Advanced Studies (SOKENDAI), Japan,
[3]National Eye Institute, NIH, USA, [4]National Institute of Neuroscience, Japan)

14 : 15  O1B-4   Color constancy of color deficient observers under illuminant changes on confusion lines and off confusion lines

Ruiqing Ma, Keizo Shinomori
(Kochi University of Technology, Japan)

14 : 30  O1B-5   Hue selectivity in human visual cortex studied by fMRI with a novel stimulation paradigm
Ichiro Kuriki[1], Pei Sun[2], Kenichi Ueno[2], Keiji Tanaka[2], Kang Cheng[2]
([1]Tohoku University, Japan, [2]RIKEN Brain Science Institute, Japan)

14 : 45  O1B-6   Various double-pulse resolutions of color opponent channels
Lin Shi
(Kunming University of Science and Technology, China,
Yunnan Provincial Computer Application Key Laboratory, China)

15 : 00  O1B-7   Influence of glossiness and shape of surface on color constancy
Yoko Mizokami, Asuka Akahori, Hirohisa Yaguchi
(Chiba University, Japan)

15 : 15  O1B-8   Comparison of fMRI measurements in lateral geniculate nucleus (LGN) and primary visual cortex (V1) with visual deficits in glaucoma
Sophie Wuerger[1], Joanne Powell[1], Anshoo Choudhary[1], Laura Parkes[2]
([1]University of Liverpool, UK, [2]University of Manchester, UK)

15 : 30 – 17 : 00  **Poster 1B**   (Even Numbers)                                    *Small Hall 2*

17 : 00 – 19 : 00  **Symposium 1A**   *Multi-modal Measurement of the Visual Cortex*

*Kagawa International Conference Hall*
Organizers: Kaoru Amano[1,2], Hiromasa Takemura[3,4]
([1]National Institute of Information and Communications Technology (NICT), Japan,
[2]Osaka University, Japan, [3]Stanford University, USA,
[4] Japan Society for the Promotion of Science (JSPS), Japan)

S1A-1    Human visual white matter pathway studied by diffusion MRI

Hiromasa Takemura[1,2]
([1]Stanford University, USA,
[2] Japan Society for the Promotion of Science (JSPS), Japan)

S1A-2    Computational modeling of responses in human visual cortex

Jonathan Winawer
(New York University, USA)

S1A-3    Phenomenal consciousness created by decoded neurofeedback

Kaoru Amano[1,2]
([1]National Institute of Information and Communications Technology (NICT), Japan,
[2]Osaka University, Japan)

S1A-4    The geometry of high-level visual representations

Nikolaus Kriegeskorte
(Medical Research Council, UK)

S1A-5    Relating neural representation and perception in primate V2

Corey Ziemba
(New York University, USA)

17 : 00 – 19 : 00  **Symposium 1B**   *Model of Visual Attention and its Application*

*Conference Room 61*
Organizer: Satoshi Shioiri (Tohoku University, Japan)

S1B-1    Computational modeling of bottom-up and top-down visual attention

Laurent Itti
(University of Southern California, USA)

S1B-2    Head direction information improves the accuracy of gaze estimation
Ryoichi Nakashima, Yu Fang, Akinori Hiratani, Kazumichi Matsumiya,
Ichiro Kuriki, Satoshi Shioiri
(Tohoku University, Japan)

S1B-3    Learning to predict gaze with the characteristics of visual fields and reaction gaps
Ryo Yonetani
(The University of Tokyo, Japan)

S1B-4    Activity recognition for the mind: Tracking reading habits

Kai Kunze
(Osaka Prefecture University, Japan)

S1B-5    Driver gaze behavior analysis focused on relationships with driving contexts
Takatsugu Hirayama
(Nagoya University, Japan)

## Posters (July 19)
*Color and Light*

P1-1    A case of impaired color knowledge but spared color perception
Yuka Ohishi[1], Hikaru Nagasawa[2], Kazuyo Tanji[1], Naohiro Saito[1], Kyoko Suzuki[1]
([1]Yamagata University Graduate School of Medicine, Japan,
[2]Yamagata Prefectural Central Hospital, Japan)

P1-2    Population responses in the macaque inferior temporal cortex encode perceptual gloss parameters

Akiko Nishio[1], Takeaki Shimokawa[2], Naokazu Goda[1,3], Hidehiko Komatsu[1,3]

([1]National Institute for Physiological Sciences, Japan,
[2]ATR Neural Information Analysis Laboratories, Japan,
[3]The Graduate University for Advanced Studies (SOKENDAI), Japan)

P1-3    Color discrimination of color vision defectives for monochromatic stimuli and natural image

Mitsuru Suzuki, Hirohisa Yaguchi, Yoko Mizokami
(Chiba University, Japan)

P1-4    Are cast-shadows coarsely processed? Using cue-conflict stimuli to explore perceptual weightings

P George Lovell, Ken Scott-Brown
(Abertay University, UK)

P1-5    Effect of object motion on perceiving a thick transparent object

Shohei Ueda[1], Yusuke Tani[1], Takehiro Nagai[2], Kowa Koida[1],
Shigeki Nakauchi[1], Michiteru Kitazaki[1]

([1]Toyohashi University of Technology, Japan, [2]Yamagata University, Japan)

P1-6    Binocular color perception based on integration of unbalanced monocular color information

Takashi Mitsunaga, Yoko Mizokami, Hirohisa Yaguchi
(Chiba University, Japan)

P1-7    A local display characterization method to improve calibration accuracies and to achieve quick chromaticity reproductions

Hiroshi Ban[1], Hiroyuki Yamashiro[2], Hiroki Yamamoto[3]

([1]Center for Information and Neural Networks (CiNet), Japan,
[2]Aino University, Japan, [3]Kyoto University, Japan)

P1-8    Conditions of a multi-view autostereoscopic 3D display for high-quality glossiness reproduction

Yuichi Sakano, Hiroshi Ando
(National Institute of Information and Communications Technology (NICT), Japan;
Center for Information and Neural Networks (CiNet), Japan)

P1-9    Practical color visibility evaluated by response time of search and selection rate in paired comparison

Toshihiro Toyota[1], Keizo Shinomori[2], Taka-aki Suzuki[1], Shigeki Nakauchi[3]

([1]Industrial Research Institute of Shizuoka Prefecture, Japan,
[2]Kochi University of Technology, Japan,
[3]Toyohashi University of Technology, Japan)

P1-10    A colour vision test optimised for the clinical population

Caterina Ripamonti, Sarah Kalwarowsky, Marko Nardini
(UCL Institute of Ophthalmology, UK)

P1-11    Local regions with normal brightness contribute more to color constancy

Yongjie Li[1], Shaobing Gao[1], Wangwang Han[1], Ruoxuan Li[1], Chaoyi Li[1,2]

([1]University of Electronic Science and Technology of China, China,
[2]Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, China)

*Spatio-temporal Vision*

P1-12  Contrast-dependent variations in the excitatory classical receptive field and suppressive non-classical receptive field of cat primary visual cortex

Ke Chen, Jiaojiao Yin, Chaoyi Li
(University of Electronic Sciences and Technology, China)

P1-13  Crowding effect and reading performance among children with dyslexia in Klang Valley area

Indira Madhavan
(Universiti Kebangsaan Malaysia, Malaysia)

P1-14  Binocular contrast interactions in iso-oriented surround suppression

Pi-Chun Huang[1], Chien-Chung Chen[2]
([1]National Cheng Kung University, Taiwan, [2]National Taiwan University, Taiwan)

P1-15  Directional perception of briefly presented motion-defined motion

Junji Yanagi, Makoto Ichikawa
(Chiba University, Japan)

P1-16  Fluttering-heart illusion caused by coexistence of first- and second-order edges

Masahiro Suzuki, Kazuhisa Yanaka
(Kanagawa Institute of Technology, Japan)

P1-17  A directional bias of apparent position shift of a moving element with a hard edge

Rumi Hisakata[1,2], Shin'ya Nishida[2]
([1]Japan Society for the Promotion of Science (JSPS), Japan,
[2]NTT Communication Science Laboratories, Japan)

P1-18  Effect of display inclination on the vertical-horizontal illusion

Akiko Yasuoka, Masahiro Ishii
(Sapporo City University, Japan)

P1-19  Illusory movement in depth-inverted, but otherwise photorealistic, Bas Relief art

Norman D Cook[1], Gianluca Sanvido[2], Ryu Satoh[3], Takefumi Hayashi[1]
([1]Kansai University, Japan, [2]Japan Mechial Plannning, Co., Japan,
[3]Green Art Gallery, Japan)

P1-20  Random-sampling leads to multiplicative noise in crowded displays

Carl Michael Gaspar, Wei Chen
(Hangzhou Normal University, China)

P1-21  New simple geometrical illusion figure — Slightly bent thick line looks straight when thin straight line is added to it

Teluhiko Hilano
(Kanagawa Institute of Technology, Japan)

P1-22  Functional architecture for "far" and "near" judgment in cat's V1

Ling Wang[1], Zhengqiang Dai[1], Jiaojiao Yin[1], Chaoyi Li[1,2]
([1]University of Electronic Science and Technology of China, China,
[2]Shanghai Institutes for Biological Sciences, China, Chinese Academy of Sciences, China)

P1-23  Spatial summation organization of visual cortical neurons embedded in the pinwheel-like-orientation map

Xuemei Song[1], Chaoyi Li[1], Ming Li[2], Tao Xu[3], Dewen Hu[2], Kaifu Yang[3], Yongjie Li[3]
([1] Shanghai Institutes for Biological Sciences, China, Chinese Academy of Sciences, China,
[2]National University of Defense Technology, China,
[3]University of Electronic Science and Technology of China, China)

P1-24　Effect of analytic observation on line length judgments of geometrical optical illusion stimulus

Ayane Murai, Ryuichi Yokota, Masahiro Ishii

(Sapporo City University, Japan)

P1-25　Stereo-curvature aftereffects from multi-level adaptation

Pengfei Yan, Hiroaki Shigemasu

(Kochi University of Technology, Japan)

P1-26　Improvement of sharpness by the addition of graininess

Xiazi Wan, Yuya Nakao, Naokazu Aoki, Hiroyuki Kobayashi

(Chiba University, Japan)

P1-27　Accuracy and resolution differences in time perception between the central and peripheral visual field

Riku Asaoka, Jiro Gyoba

(Tohoku University, Japan)

### *Visual Recognition*

P1-28　Perception of shape from shadows in infancy

Kazuki Sato[1,2], So Kanazawa[3], Masami K Yamaguchi[1]

([1]Chuo University, Japan, [2]Japan Society for the Promotion of Science (JSPS), Japan,
[3]Japan Women's University, Japan)

P1-29　Reduced perceptual error in action observation induced by body ownership illusion

Shigeaki Nishina

(Honda Research Institute, Japan)

P1-30　Perceptual narrowing toward adult faces in Japanese infants: a behavioral and a near-infrared spectroscopic study

Megumi Kobayashi[1,2], Viola Macchi Cassia[3], So Kanazawa[4],
Masami K Yamaguchi[5], Ryusuke Kakigi[1]

([1]National Institute for Physiological Sciences, Japan,
[2]Japan Society for the Promotion of Science (JSPS), Japan,
[3]University of Milano-Bicocca, Italy, [4]Japan Women's University, Japan,
[5]Chuo University, Japan)

P1-31　Relationship between timing of object category representation and the level of category abstraction in the human visual cortex

Masashi Sato, Yoichi Miyawaki

(The University of Electro-Communications, Japan)

P1-32　Asymmetrical effects of smile and sad expressions on attractiveness

Ryuhei Ueda, Hiroshi Ashida, Kana Kuraguchi

(Kyoto University, Japan)

P1-33　Reliability and interpretation of visually evoked single-trial peaks

Wei Chen, Carl Michael Gaspar

(Hangzhou Normal University, China)

P1-34　The aftereffect of different mouth shapes in Korean language system

Chunmae Lee, Dayi Jung, Kyongmee Chung

(Yonsei University, Korea)

P1-35  Degraded recognition of facial expressions in patients with Parkinson's Disease

Li-Chuan Hsu[1], Chia-Yao Lin[1], Chon-Haw Tsai[2], Yi-Min Tien[3]

([1]China Medical University, Taiwan, [2]China Medical College Hospital, Taiwan, [3]Chung Shan Medical University, Taiwan)

### *Visual Attention, Awareness and Cognition*

P1-36  The difference of visual ability between experts and novices in visual art

Yusuke Tani[1], Ryo Nishijima[1], Takehiro Nagai[2], Kowa Koida[1], Michiteru Kitazaki[1], Shigeki Nakauchi[1]

([1]Toyohashi University of Technology, Japan, [2]Yamagata University, Japan)

P1-37  The effects of a first person shooter game on cognitive task performance

Yasuhiro Seya, Hiroyuki Shinoda

(Ritsumeikan University, Japan)

P1-38  Visual statistical learning of temporal structure in different hierarchical levels

Jihyang Jun, Sang Chul Chong

(Yonsei University, Korea)

P1-39  Responsive extrastriate maps despite a V1 lesion and quarterfield blindness

Hiroshi Horiguchi[1], Brian A Wandell[2], Yaping Joyce Liao[2], Jonathan Winawer[3]

([1]Jikei University School of Medicine, Japan, [2] Stanford University, USA, [3]New York Univesity, USA)

P1-40  The effect of depth information on visual attention under monocular and stereopsis viewing: An object substitution masking study

Kana Miyaji[1], Ken Kihara[1], Jun Shimamura[2], Yukinobu Taniguchi[2], Sakuichi Ohtsuka[1]

([1]Kagoshima University, Japan, [2]NTT Media Inteligence Laboratories, Japan)

P1-41  The level of categorical knowledge affects visual search efficiency

Kanji Tanaka, Na Chen, Katsumi Watanabe

(The University of Tokyo, Japan)

P1-42  Time course of interference by task-irrelevant distractors in the Stroop and Simon effects

Satoko Ohtuka, Reishi Kogure

(Saitama Institute of Technology, Japan)

P1-43  Vection inhibition by adding semantic meanings to optic-flow stimuli

Masaki Ogawa, Takeharu Seno

(Kyushu University, Japan)

P1-44  Cognitive processing of gaze and arrow in a flanker task

Huan Yu, Xueming Zhang

(Beijing Normal University, China)

P1-45  Contrast effect on legibility of Thai letters presented on LED display

Kitirochna Rattanakasamsuk

(Rajamangala University of Technology, Thailand)

P1-46  The effects of attentional concentration on dynamic characteristics of drift eye movements

Takeshi Kohama, Daisuke Noguchi, Sho Kikkawa, Hisashi Yoshida

(Kinki University, Japan)

Program July 19 (Day 1)

*Interactive Vision*

P1-47  Measuring attention around the hand by using flash lag effect
Ryota Nishikawa, Kazumichi Matsumiya, Ichiro Kuriki, Satoshi Shioiri
(Tohoku University, Japan)

P1-48  Visual crowding distorts oculomotor space
Masahiko Terao, Ikuya Murakami
(The University of Tokyo, Japan)

P1-49  Effects of harmony between color and fragrance on work efficiency
Mei Yoneda, Kana Kuraguchi, Hiroshi Ashida
(Kyoto University, Japan)

P1-50  Guidance or interference? Augmented feedback benefits bimanual coordination even after removal
Shiau-Chuen Chiou, Erik Chihhung Chang
(National Central University, Taiwan)

P1-51  Orientation of the palms alters bistable visual motion perception
Godai Saito, Jiro Gyoba
(Tohoku University, Japan)

# Sunday, July 20 (Day 2)

8 : 30 – 10 : 45 **Talk 2A** *Interactive Vision* *Kagawa International Conference Hall*
Moderators: David P Crewther[1], Kazumichi Matsumiya[2]
([1]Swinburne University of Technology, Australia, [2]Tohoku University, Japan)

8 : 30 O2A-1 The visuotypy of autistic tendency
David P Crewther
(Swinburne University of Technology, Australia)

8 : 45 O2A-2 Motor intention on a complex airplane piloting task is predicted by attentional modulation of visual brain areas
Daniel E Callan[1,2,3], Daniel Cassel[3,4], Cengiz Terzibas[1,2], Mario Gamez[3], Hiroshi Ando[1,2]
([1]Center for Information and Neural Networks (CiNet), Japan,
[2]National Institute of Information and Communications Technology (NICT), Japan,
[3]ATR Neural Information Analysis Laboratories, Japan, [4]The Hospital for Sick Children, Canada)

9 : 00 O2A-3 Biased competition between vision and biomechanics in human walking
Ute Leonards, John Fennell, Charlotte Goodwin, Jeremy Burn
(University of Bristol, UK)

9 : 15 O2A-4 The critical delay for changing self-body sensations and self-view sensations
Seiya Kamiya, Takako Yoshida
(Tokyo Institute of Technology, Japan)

9 : 30 O2A-5 Attentive tracking of switching-in-depth moving objects in 3D space
Anis Ur Rehman, Akiko Matsumoto, Ken Kihara, Sakuichi Ohtsuka
(Kagoshima University, Japan)

9 : 45 O2A-6 The mirror illusion: Does proprioceptive drift go hand in hand with the sense of agency?
Daisuke Tajima[1], Tota Mizuno[2], Yuichiro Kume[3], Takako Yoshida[1]
([1]Tokyo Institute of Technology, Japan, [2]The University of Electro-Communications, Japan,
[3]Tokyo Polytechnic University, Japan)

10 : 00 O2A-7 Multiple gaze saccades during unrestrained eye-head movement in visual search
Yu Fang[1], Ryoichi Nakashima[1,2], Kazumichi Matsumiya[1], Ichiro Kuriki[1], Satoshi Shioiri[1]
([1]Tohoku University, Japan, [2]Japan Science and Technology Agency (JST), Japan)

10 : 15 O2A-8 Motion aftereffect induced by actively moving one's own hand
Kazumichi Matsumiya, Satoshi Shioiri
(Tohoku University, Japan)

10 : 30 O2A-9 Visual search for self-controlled vs. non-controlled object
Hideyuki Kobayashi, Takako Yoshida
(Tokyo Institute of Technology, Japan)

8 : 30 – 10 : 45 **Talk 2B** *Mid-level Vision* *Conference Room 61*
Moderators: Cees van Leeuwen[1], Takahiro Kawabe[2]
([1]Katholieke Universiteit Leuven, Belgium,
[2]NTT Communication Science Laboratories, Japan)

8 : 30 O2B-1 Electrophysiological responses to visual symmetry
Marco Bertamini, Alexis D J Makin
(University of Liverpool, UK)

8 : 45  O2B-2   The law of proximity in new light

Cees van Leeuwen[1,2,3], Sergei Gepshtein[3,4], Aleksandra Zharikova[1], Ekaterina Levichkina[3,5]
([1]Katholieke Universiteit Leuven, Belgium, [2]Technische Universität Kaiserslautern, Germany,
[3]RIKEN Brain Science Institute, Japan, [4]SALK Institute, USA,
[5]University of Melbourne, Australia)

9 : 00  O2B-3   Perceptual constancy and subjective/objective modes of perception

John O'Dea
(The University of Tokyo, Japan)

9 : 15  O2B-4   Relationship between brightness enhancement and self-luminosity of the glare illusion

Hideki Tamura, Shigeki Nakauchi, Kowa Koida
(Toyohashi University of Technology, Japan)

9 : 30  O2B-5   Shape and material from intensity gradient: A hypothesis

Masataka Sawayama, Shin'ya Nishida
(NTT Communication Science Laboratories, Japan)

9 : 45  O2B-6   The development of contrast sensitivity for gratings and natural images: revisiting the gold standard

Dave Ellemberg
(University of Montreal, Canada)

10 : 00  O2B-7   Image deformation as a perceptual cue to a transparent layer

Takahiro Kawabe, Kazushi Maruya, Shin'ya Nishida
(NTT Communication Science Laboratories, Japan)

10 : 15  O2B-8   A number of experiments on number

Nicholas E Scott-Samuel, Natasha Davies, Caitlin Molloy, Alan To
(University of Bristol, UK)

10 : 30  O2B-9   Optimal audiovisual integration of object appearance and impact sounds in human perception of materials

Waka Fujisaki[1], Naokazu Goda[2], Isamu Motoyoshi[3], Hidehiko Komatsu[2], Shin'ya Nishida[4]
([1]National Institute of Advanced Industrial Science and Technology (AIST), Japan,
[2]National Institute for Physiological Sciences, Japan, [3]The University of Tokyo, Japan,
[4]NTT Communication Science Laboratories, Japan)

10 : 45 – 12 : 15  **Poster 2A** (Odd Numbers)                                    *Small Hall 2*

12 : 15 – 13 : 15  **Lunch time seminar 2**                                    *Conference Room 61*

13 : 30 – 15 : 30  **Symposium 2A**   *Higher-order Mechanisms of Color Vision*

*Kagawa International Conference Hall*
Organizers: Yoko Mizokami[1], Takehiro Nakagai[2]
([1]Chiba University, Japan, [2]Yamagata University, Japan)

S2A-1   The enigma of unique hues

[1]Qasim Zaidi, [1]Robert Ennis, [1]Lauren Wool, [1]Stanley Komban, [1]Jose-Manuel Alonso,
[2]Bevil Conway, [2]Galina Gagin, [2]Kaitlin Bohon
([1]State University of New York, USA, [2]Wellesley College, USA)

S2A-2   Cortical processing of surface colour and translucency

Erin Goddard[1], Colin W G Clifford[2]
([1]Macquarie University, Australia, [2]UNSW Australia, Australia)

S2A-3   Construction of a space perception needed for the color constancy

Chanprapha Phuangsuwan
(Rajamangala University of Technology Thanyaburi, Thailand)

S2A-4   Impact of covariant luminance-color gradation on brightness perceptions

Kowa Koida
(Toyohashi University of Technology, Japan)

## 13 : 30 – 15 : 30   Symposium 2B   *Advances in Neural Coding in Visual Cortex*

*Conference Room 61*
Organizer: Takanori Uka
(Juntendo University, Japan)

S2B-1   Adaptation maintains population homeostasis in primary visual cortex

Andrea Benucci
(RIKEN Brain Science Institute, Japan)

S2B-2   Neural mechanisms underlying motion-in-depth selectivity in macaque area MT

Takahisa M Sanada[1] and Gregory C DeAngelis[2]
([1]National Institute for Physiological Sciences, Japan,
[2]University of Rochester, USA)

S2B-3   Neural correlates of 3D spatial perception in parietal cortex

Ari Rosenberg
(Baylor College of Medicine, USA)

S2B-4   Spatial arrangement of neurons in monkey V1 and V4 according to their orientation selectivity:
A 2-photon calcium imaging study

Koji Ikezoe
(Osaka University, Japan)

S2B-5   Intensive and extensive recording of visual cortical activity by electrocorticography

Isao Hasegawa
(Niigata University, Japan)

## 15 : 30 – 17 : 00   Poster 2B   (Even Numbers)                      *Small Hall 2*

## 17 : 00 – 19 : 00   Symposium 2C   *Visual Perception of Object Qualities and Materials*

*Kagawa International Conference Hall*
Organizer: Shin'ya Nishida
(NTT Communication Science Laboratories, Japan)

S2C-1   Distinguishing shading and albedo when the two are correlated

Roland W Fleming
(University of Giessen, Germany)

S2C-2   Perception on time-dependent changes of materials: Freshness and aging estimations

Katsunori Okajima
(Yokohama National University, Japan)

S2C-3   Neural representation of materials of objects in human and monkey visual cortex

Naokazu Goda[1,2]
([1]National Institute for Physiological Sciences, Japan,
[2]The Graduate University for Advanced Studies (SOKENDAI), Japan)

S2C-4    Coupled computations of 3D shape, material properties, and the illumination field

Barton L Anderson

(The University of Sydney, Australia)

17 : 00 – 19 : 00    **Symposium 2D**    *Illusory Perceptions of Body Orientation and Self-motion in Real and Virtual Environments*    *Conference Room 61*

Organizer: Kenzo Sakurai

(Tohoku Gakuin University, Japan)

S2D-1    Illusory scene shearing during real and illusory self-rotations in roll

Stephen Palmisano[1], Robert S Allison[2], Ian P Howard[2]

([1]University of Wollongong, Australia, [2]York University, Canada)

S2D-2    Various factors can modulate vection strength

Takeharu Seno

(Kyushu University, Japan)

S2D-3    Factors of inverted vection in depth

Kenzo Sakurai, Yasuhiko Saito

(Tohoku Gakuin University, Japan)

S2D-4    Tilted body or tilted world? A field study of verticality misperception on a moving mountain tram

Chia-huei Tseng[1], Hiu Mei Chow[1,2], Matt Oxner[1], Lothar Spillmann[3]

([1]University of Hong Kong, Hong Kong, [2]University of Massachusetts Boston, USA, [3]University of Freiburg, Germany)

S2D-5    Vestibular and neck proprioceptive contributions to the perceived vertical

Laurence Harris, Lindsey Fraser

(York University, Canada)

# Posters (July 20)
*Color and Light*

P2-1    Recognition of illumination and object color changes on an object with specular reflection components

Takehiro Nagai, Shigeyuki Kaneko, Yuki Kawashima, Yasuki Yamauchi

(Yamagata University, Japan)

P2-2    Brightness induction similar to the surround modulation

Makiko Miyasaka, Katsuaki Sakata

(Joshibi University of Art and Design, Japan)

P2-3    Colorimetry-free color management system for displays

Naoki Kurita, Hiroyuki Shinoda, Yasuhiro Seya

(Ritsumeikan University, Japan)

P2-4    Perceptual rivalry in afterimages

Hiroyuki Ito, Erika Tomimatsu

(Kyushu University, Japan)

P2-5    Spatial layout of a natural scene with no luminance information influences lightness perception

Kei Kanari, Hirohiko Kaneko

(Tokyo Institute of Technology, Japan)

P2-6 Development of contrast dependent pattern discrimination in the macula during childhood
Li-Ting Tsai[1], Chien-Chung Chen[1], Yu-Chin Su[2], Chien-Te Wu[1], Kuo-Meng Liao[3]
([1]National Taiwan University, Taiwan, [2]Taipei Tzu Chi Hospital, Taiwan,
[3]Taipei City Hospital, Taiwan)

P2-7 Highly saturated color evoked human dorsal pathway: fMRI studies
Ippei Negishi, Keizo Shinomori
(Kochi University of Technology, Japan)

P2-8 Adding blue or yellow sector onto Benham's top
Chiemi Miyata[1], Ken Kihara[1], Sakuichi Ohtsuka[1], Hiroshi Ono[2]
([1]Kagoshima University, Japan, [2]York University, Canada)

P2-9 Time course of color appearance change on mobile display under illuminance change
Hidenori Tanaka, Hirohisa Yaguchi, Yoko Mizokami
(Chiba University, Japan)

P2-10 Measurement of color appearance with color category rating method
Yasuki Yamauchi[1], Yuhei Shoji[1], Tatsuya Tajima[2], Takehiro Nagai[1], Taiichiro Ishida[2]
([1]Yamagata University, Japan, [2]Kyoto University, Japan)

### *Spatio-temporal Vision*

P2-11 Your eyes want to see the illusion: Directional asymmetry of eye movements increases illusory motion
Soyogu Matsushita[1,2], Shigeru Muramatsu[1], Akiyoshi Kitaoka[1]
([1]Ritsumeikan University, Japan, [2]Osaka University, Japan)

P2-12 Effect of distribution of elements between front and back surfaces on perceived numerosity for a stereo-transparency stimulus
Saori Aida[1,2], Tsutomu Kusano[1], Koichi Shimono[1]
([1] Tokyo University of Marine Science and Technology, Japan,
[2]Japan Society for the Promotion of Science (JSPS), Japan)

P2-13 Two distinct patterns of activity in early visual areas during binocular rivalry
Hiroyuki Yamashiro[1], Hiroki Yamamoto[2], Hiroaki Mano[3], Masahiro Umeda[3],
Toshihiro Higuchi[3], Jun Saiki[2]
([1]Aino University, Japan, [2]Kyoto University, Japan,
[3]Meiji University of Integrative Medicine, Japan)

P2-14 Perceived speed of apparent motion in high-speed conditions
Yutaka Nakajima, Yutaka Sakaguchi
(The University of Electro-Communications, Japan)

P2-15 Impaired speed estimation of overlapping moving objects
Kentaro Yamamoto, Katsumi Watanabe
(The University of Tokyo, Japan)

P2-16 Motion illusion induced by color changes
Akiyoshi Kitaoka
(Ritsumeikan University, Japan)

P2-17 The effect of color on vection
Megumi Yamaguchi, Yasuhiro Seya, Hiroyuki Shinoda
(Ritsumeikan University, Japan)

P2-18  What makes space-time interactions in human cognition asymmetrical?

Chizuru Take Homma, Hiroshi Ashida

(Kyoto University, Japan)

P2-19  Anisotropies in apparent displacements of a visual target during large-field visual motion stimulation

Wataru Teramoto, Hiromu Hoshiga

(Muroran Institute of Technology, Japan)

P2-20  A model of depth perception using relative motion velocity in motion parallax

Aya Shiraiwa[1], Takefumi Hayashi[2]

([1]Kwansei Gakuin University, Japan, [2]Kansai University, Japan)

P2-21  Measurements of subjective length of filled duration determined by dynamic random dots

Erika Tomimatsu, Yoshitaka Nakajima, Hiroyuki Ito

(Kyushu University, Japan)

P2-22  Motion processing in retinotopic and spatiotopic coordinates at low light levels

Sanae Yoshimoto[1,2], Mariko Uchida-Ota[1], Tatsuto Takeuchi[1]

([1]Japan Women's University, Japan, [2]Japan Society for Promotion of Sciences (JSPS), Japan)

P2-23  The optimal density ratio for aesthetic judgment in symmetric patterns

Chia-Ching Wu[1], Chien-Chung Chen[2]

([1]Fo Guang University, Taiwan, [2]National Taiwan University, Taiwan)

P2-24  Effects of horizontal vs. vertical presentations of two successive flashes on duration categorization

Tsuyoshi Kuroda[1], Simon Grondin[2], Shozo Tobimatsu[1]

([1]Kyushu University, Japan, [2]Université Laval, Canada)

### *Visual Recognition*

P2-25  Spatial frequency in paintings by artists with/without migraine: A pilot study

Shu Imaizumi[1,2], Akira Iwaya[1], Haruo Hibino[1], Shinichi Koyama[1,3]

([1]Chiba University, Japan, [2]Japan Society for the Promotion of Sciences (JSPS), Japan,
[3]Nanyang Technological University, Singapore)

P2-26  The role of upper and lower faces in discriminating happy and sad facial expressions

Pei-Yin Chen, Yi-Cheng Pan, Chien-Chung Chen

(National Taiwan University, Taiwan)

P2-27  Experience-driven perceptual bias in face processing for 8–11 month-old infants

Nga Ki Kong, Cynthia Yui Hang Chan, Kevin Ho Man Cheng, Chia-huei Tseng

(The University of Hong Kong, Hong Kong)

P2-28  The novel facial identity aftereffect elicited by simple curve

Miao Song

(Shanghai Maritime University, China)

P2-29  Race-specific aftereffect using anti-face: A pilot study

Euihyun Kwak, Chunmae Lee, Kyongmee Chung

(Yonsei University, Korea)

P2-30  Infants' visual discrimination of mirror letter images

Wakayo Yamashita[1], Yumiko Otsuka[2], Ayanori Tanaka[4], Kazuki Sato[4],
So Kanazawa[3], Masami K Yamaguchi[4]

([1]Kagoshima University, Japan, [2]UNSW Australia, Australia,
[3]Japan Women's University, Japan, [4]Chuo University, Japan)

P2-31  The BOLD and the beautiful: Neural responses to natural scene statistics in early visual cortex

Zoey Jeanne Isherwood[1], Mark M Schira[2], Branka Spehar[3]

([1]UNSW Australia, Australia, [2]The University of Wollongong, Australia,
[3]Neuroscience Research Australia, Australia)

P2-32  Does cuteness differ from beauty in peripheral vision?

Kana Kuraguchi, Hiroshi Ashida
(Kyoto University, Japan)

### *Visual Attention, Awareness and Cognition*

P2-33  Unconscious contour integration based on biocular rivalry

Hongmei Yan, Huiyun Du, Cheng Chen
(University of Electronic Science and Technology of China, China)

P2-34  Comparison of effectiveness of different types of misdirection: Using card magic illusions

Ryo Tachibana, Jiro Gyoba
(Tohoku University, Japan)

P2-35  Attention-dependent modulation of spike synchrony and firing rates for border-ownership selective neurons in a network model

Nobuhiko Wagatsuma[1], Rudiger von der Heydt[2], Ernst Niebur[2]
([1]Tokyo Denki University, Japan, [2]Johns Hopkins University, USA)

P2-36  Face in the crowd effect: An angry face advantage is found using ensemble search paradigm

Jingchao Liu[1], William Hayward[2], Matt Oxner[2]
([1]University of Hong Kong, Hong Kong, [2]University of Auckland, New Zealand)

P2-37  Can unaware emotional information activate space-valence association?

Kyoshiro Sasaki, Yuki Yamada, Kayo Miura
(Kyushu University, Japan)

P2-38  Focus size of attention: Exploring the focus hypothesis on the collinear masking effect in visual search

Ching-Wen Chiu, Li Jingling
(China Medical University, Taiwan)

P2-39  Contextual cueing effect for unseen targets

Masayuki Kobayashi[1], York Fang[1], Ryoichi Nakashima[1,2],
Kazumichi Matsumiya[1], Ichiro Kuriki[1], Satoshi Shioiri[1]
([1]Tohoku University, Japan, [2]Japan Science and Technology Agency (JST), Japan)

P2-40  Seeing the word I and my face activates my name: Close link between self-awareness and one's own name

Kuei-An Li, Jen-Hao Li, Su-Ling Yeh
(National Taiwan University, Taiwan)

P2-41  Pre-cueing of correct response enhances the Simon Effect

Fei Tian, Kazumitsu Shinohara
(Osaka University, Japan)

P2-42  Does ocular origin of stimuli always help you find a target? It depends!

Yuk Sheung Yeung[1], Meougsun Lee[1], Hiu Mei Chow[1,2], Chia-huei Tseng[1]
([1]The University of Hong Kong, Hong Kong, [2]University of Massachusetts Boston, USA)

P2-43  Global versus local saliency: Determinants of access to visual awareness

Yung-Hao Yang[1,2], Su-Ling Yeh[2], Andreas Bartels[1]
([1]University of Tübingen, Germany, [2]National Taiwan University, Taiwan)

P2-44  Effect of optical flow in the entire visual field on attentional blink

Shinya Takagawa, Ken Kihara, Sakuichi Ohtsuka
(Kagoshima University, Japan)

P2-45  Visual search for a walker and a box: Search asymmetry in approaching and deviating walkers

Rie Ishimoto, Michiteru Kitazaki
(Toyohashi University of Technology, Japan)

### *Interactive Vision*

P2-46  Impaired biological motion perception and action recognition in children with autism spectrum disorder

Liang Hui Wang[1,2], Tzu-Yun Chen[2], Hsin-Shui Chen[2,1], Sarina Hui-Lin Chien[1]
([1]China Medical University, Taiwan, [2]China Medical University Bei-Gang Hospital, Taiwan)

P2-47  The intention of an action distorts the timing of a Go/No-go signal of the action

Yoshiko Yabe[1,2], Melvyn Goodale[1]
([1]University of Western Ontario, Canada, [2]Kochi University of Technology, Japan)

P2-48  Visual field asymmetry in auditory facilitation effects for visual identification and localization performance

Yasuhiro Takeshima, Jiro Gyoba
(Tohoku University, Japan)

P2-49  The influence of gravity on length perception: The vestibular system delays eye movements that affects on length judgement

Shuilan He, Katsuaki Sakata
(Joshibi University of Art and Design, Japan)

P2-50  The visual processing facilitation by the head direction

Ryoichi Nakashima, Satoshi Shioiri
(Tohoku University, Japan)

# Monday, July 21 (Day 3)

8 : 30 – 10 : 30 **Talk 3A** *Spatio-temporal Vision* *Kagawa International Conference Hall*

Moderator: Philip M Grove[1], Kazushi Maruya[2]
([1]The University of Queensland, Australia, [2]NTT Communication Science Laboratories, Japan)

8 : 30 O3A-1 Effect of changing vertical disparity on perceived trajectory of moving object
Hirohiko Kaneko, Takashi Adachi, Toru Maekawa
(Tokyo Institute of Technology, Japan)

8 : 45 O3A-2 Sensory and decisional factors involved in resolving audio-visual motion sequences
Philip M Grove
(The University of Queensland, Australia)

9 : 00 O3A-3 When a Mackintosh chair looks like a young woman: A study on visual object personification
Ryosuke Niimi
(The University of Tokyo, Japan)

9 : 15 O3A-4 Integration of multiple spatial frequency channels in V1 disparity detectors
Mika Baba, Kota S Sasaki, Izumi Ohzawa
(Osaka University, Japan)

9 : 30 O3A-5 V1 mechanisms related to encoding global visual motion
Choongkil Lee, Kayeon Kim, Eunyoung Kim, Taehwan Yoon
(Seoul National University, Korea)

9 : 45 O3A-6 Non-uniform flow aftereffect produced by adaptation to sparse uni-directional motion flows
Kazushi Maruya, Shin'ya Nishida
(NTT Communication Science Laboratories, Japan)

10 : 00 O3A-7 Perception of global image contrast is predicted by the same spatial integration model of gain control as detection and discrimination
Tim Simon Meese, Daniel H Baker, Robert J Summers
(Aston University, UK)

10 : 15 O3A-8 Modelling the human visual cortex, a complete model from visual stimulus to BOLD measurement
Mark M Schira[1,2], Peter Robinson[3], Michael J Breakspear[4], Kevin M Aquino[2,3]
([1]University of Wollongong, Australia, [2]Neuroscience Research Australia, Australia,
[3]University of Sydney, Australia, [4]QIMR Berghofer Medical Research Institute, Australia)

10 : 30 O3A-9 The effect of flicker on apparent spatial frequency
Sae Kaneko[1,2], Deborah Giaschi[3], Stuart Anstis[1]
([1]University of California, San Diego, USA,
[2]Japan Society for the Promotion of Science (JSPS), Japan,
[3]University of British Columbia, Canada)

8 : 30 – 10 : 30 **Talk 3B** *Visual Search* *Conference Room 61*

Moderators: Erik Van der Burg[1], Michael D Patterson[2]
([1]University of Sydney, Australia, [2]Nanyang Technological University, Singapore)

8 : 00  O3B-1  Evolving the stimulus to fit the brain: A genetic algorithm reveals the brain's feature priorities in visual search

Erik Van der Burg[1], John Cass[2], Jan Theeuwes[3], David Alais[1]
([1]University of Sydney, Australia, [2]University of Western Sydney, Australia,
[3]VU University Amsterdam, The Netherlands)

8 : 45  O3B-2  Visual search in heterogeneous displays is not a categorical process: Evidence from genetic algorithms

Garry Kong, David Alais, Erik van der Burg
(University of Sydney, Australia)

9 : 00  O3B-3  Human visual search performance for military issued camouflaged targets

Olivia Emily Matthews, Tim Volonakis, Innes C Cuthill,
Nicholas E Scott-Samuel, Roland Baddeley
(University of Bristol, UK)

9 : 15  O3B-4  The many ways to hide: a computer vision-based model of visual similarity between camouflage patterns

László Tálas, Roland Baddeley, Innes C Cuthill
(University of Bristol, UK)

9 : 30  O3B-5  The collinear masking effect can emerge as fast as 40 ms

Li Jingling, Ching-Wen Chiu
(China Medical University, Taiwan)

9 : 45  O3B-6  Habitual video gamers can still learn from new games

Michael D Patterson, Han Jing Yang, Qinyuen Wong
(Nanyang Technological University, Singapore)

10 : 00  O3B-7  Eye of origin information does not always facilitate target search

Sunny Lee[1], May Yuk Sheung Yeung[1], Hiu Mei Chow[1,2], Chia-huei Tseng[1]
([1]University of Hong Kong, Hong Kong, [2]University of Massachusetts Boston, USA)

10 : 15  O3B-8  Correlation between amplitude and phase of SSVEP as an attention measure

Satoshi Shioiri, Yoshiyuki Kashiwase, Kazumichi Matsumiya, Ichiro Kuriki
(Tohoku University, Japan)

10 : 45 – 12 : 15  **Poster 3A**  (Odd Numbers)                    *Small Hall 2*

13 : 30 – 15 : 30  **Symposium 3A**  *Functional and Structural MRI of Visual Brain Networks*
                                                   *Kagawa International Conference Hall*
Organizer: Mark W Greenlee
(University of Regensburg, Germany)

S3A-1  Studying physiological properties in human visual cortex using a high-resolution single-voxel fMRI approach

Kang Cheng
(RIKEN Brain Science Institute, Japan)

S3A-2  The phase of ongoing EEG brain oscillations modulates perceptual performance and functional connectivity in the visual brain

Gregor Volberg, Simon Hanslmayr, Mark W Greenlee
(University of Regensburg, Germany)

S3A-3  Cortical network underlying perception of real and illusory motions

Hiroshi Ashida
(Kyoto University, Japan)

S3A-4    The functions and connections of the Cingulate Sulcus Visual Area (CSv)

Andrew T Smith

(Royal Holloway, University of London, UK)

S3A-5    Multisensory brain networks as revealed by functional MRI and fiber tracking based on diffusion-weighted MRI

Anton L Beer

(University of Regensburg, Germany)

13 : 30 – 15 : 30  **Symposium 3B**    *Statistical Visual Cognition*    *Conference Room 61*

Organizer: Jun Saiki

(Kyoto University, Japan)

S3B-1    Representations of total area, numerosity, and mean size of elements in a visual display

Sang-Chul Chong

(Yonsei University, Korea)

S3B-2    The eccentricity effect in statistically-based scene understanding

Hayaki Banno

(Kwansei-Gakuin University, Japan)

S3B-3    Memory is enhanced and inhibited by statistical regularities

Sachio Otsuka

(Kyoto University, Japan)

S3B-4    Interactions of statistical learning with perception and attention

Nick Turk-Browne

(Princeton University, USA)

17 : 00 – 18 : 00  **Talk 3C**    *Depth Perception*    *Kagawa International Conference Hall*

Moderator: Haruki Mizushina

(National Institute of Information and Communications Technology (NICT), Japan)

17 : 00  O3C-1    Neural correlates of vection under wide-view stereoscopic visual display

Atsushi Wada, Yuichi Sakano, Hiroshi Ando

(National Institute of Information and Communications Technology (NICT), Japan;
Center for Information and Neural Networks (CiNet), Japan)

17 : 15  O3C-2    Far from the skies, close to the ground — why do we misperceive distances

Oliver M Toskovic

(University of Belgrade, Serbia)

17 : 30  O3C-3    Relationship between maximum screen disparity for viewing stereoscopic images without discomfort and individual variation in visual function

Haruki Mizushina, Hiroshi Ando

(National Institute of Information and Communications Technology (NICT), Japan)

17 : 45  O3C-4    Effect of number of surfaces on perceived depth between two outermost surfaces of a stereo-transparency stimulus

Koichi Shimono[1], Saori Aida[1], Wa James Tam[2]

([1]Tokyo University of Marine Science and Technology, Japan, [2]University of Ottawa, Canada)

17 : 00 – 18 : 00  **Talk 3D**    *Visual Awareness*    *Conference Room 61*

Moderator: Su-Ling Yeh

(National Taiwan University, Taiwan)

17 : 00  O3D-1  Semantic processing of invisible words under interocular suppression: Evidence from evoked-related potentials

Su-Ling Yeh[1], Jifan Zhou[1], Kuei-An Li[1], Yung-Hsuan Tien[1], Yi-Huan Chen[1], Yih-Shiuan Lin[1], Alan Pegna[2,3]

([1]National Taiwan University, Taiwan, [2]Geneva University Hospitals, Switzerland, [3]University of Geneva, Switzerland)

17 : 15  O3D-2  Aesthetic influences on visual awareness?: An 'inward bias' in inattentional blindness

Yi-Chia Chen, Brian J Scholl

(Yale University, USA)

17 : 30  O3D-3  Perceptual learning weakens crowding by reducing identity but not position errors

JunYun Zhang, YingZi Xiong, Cong Yu

(Peking University, China)

17 : 45  O3D-4  Filling in the blanks in cortical blindness

Juno Kim[1], Stuart Anstis[2]

([1]UNSW Australia, Australia, [2]University of California, San Diego, USA)

19 : 00 –  **Demo night & Banquet**  *HITEN room JR Hotel Clement Takamatsu (3F)*

## Posters (July 21)
### *Color and Light*

P3-1  Egg camouflage is maximised by matching chromatic but not textural cues in the Japanese quail

Karen Anne Spencer[1], Camille Duval[1], P George Lovell[1,2]

([1]University of St Andrews, UK, [2]Abertay University, UK)

P3-2  Chromatic aberration of the human eye and corneal and crystalline lens powers

Masashi Nakajima[1,2], Takahiro Hiraoka[3], Tetsuro Oshika[3], Yoko Hirohara[2], Toshifumi Mihashi[1]

([1]Tokyo Institute of Technology, Japan, [2]TOPCON Co., Japan, [3]University of Tsukuba, Japan)

P3-3  Color constancy effect measured by color naming method with functional filters for optical simulations of aged ocular lens and dichromats

Mio Hashida, Ippei Negishi, Keizo Shinomori

(Kochi University of Technology, Japan)

P3-4  Evaluation of the relationship between color discriminability, color categorization, and glare perception while wearing colored lenses in young adults

Kenichiro Kawamoto[1,2], Keiko Yamamoto[1], Natsumi Noguchi[1], Hidetsugu Kawashima[3], Akio Tabuchi[1], Tenji Wake[2]

([1]Kawasaki University of Medical Welfare, Japan, [2]Kanagawa University, Japan, [3]Aichi Shukutoku University, Japan)

P3-5  Recognition of sunlight-related illumination environment influences color constancy effect on three dimensional room images of computer graphics

Kouki Ueta, Ippei Negishi, Keizo Shinomori

(Kochi University of Technology, Japan)

P3-6  Contrast sensitivity function measured by a four-primary illumination system

Naoshi Hamazono[1], Katsunori Okajima[2], Sei-ichi Tsujimura[1]

([1]Kagoshima University, Japan, [2]Yokohama National University, Japan)

P3-7  Measurements of daylight during a day and at various locations

Cong Zhang, Tomohisa Matsumoto, Kazuho Fukuda, Toshifumi Mihashi, Keiji Uchikawa

(Tokyo Institute of Technology, Japan)

*Spatio-temporal Vision*

P3-8    Connectivity between brain regions associated with optic flow processing
Maiko Uesaki, Hiroshi Ashida
(Kyoto University, Japan)

P3-9    Individual differences in stereopsis and affecting factors
Masayuki Sato
(University of Kitakyushu, Japan)

P3-10   A new bistable percept: the bistable fan illusion
Yung-Hsuan Tien, Su-Ling Yeh
(National Taiwan University, Taiwan)

P3-11   Binocular directional capture of monocular stimuli without allolotropia
Tsutomu Kusano, Saori Aida, Koichi Shimono
(Tokyo University of Marine Science and Technology, Japan)

P3-12   Temporal relationship between the flash-drag effect and the flash-lag effect: Psychophysics and modeling
Yuki Murai, Ikuya Murakami
(The University of Tokyo, Japan)

P3-13   Afterimage duration reflects orientation-selectivity of interocular suppression
Motomi Shimizu, Eiji Kimura
(Chiba University, Japan)

P3-14   Illusory contours on random dot images
Masahiro Ishii
(Sapporo City University, Japan)

P3-15   Active task measurements of tolerance to stereoscopic 3D image distortion
Robert Scott Allison, Karim Benzeroual, Laurie M Wilcox
(York University, Canada)

P3-16   Effect of the target object visibility on velocity perception during smooth pursuit eye movement
Minhyeok Kim, Keita Ishibashi, Koichi Iwanaga
(Chiba University, Japan)

P3-17   Ambiguity of rotating directions in the silhouette figure
Yin Zhu, Tadayuki Tayama
(Hokkaido University, Japan)

P3-18   Phase tagging for single trial MEG responses under binocular rivalry
Takashi Shinozaki, Yasushi Naruse
(National Institute of Information and Communications Technology (NICT), Japan)

P3-19   Visual fatigue of viewing stereoscopic display with different ranges of binocular disparity
Hiroyasu Ujike[1], Hiroshi Watanabe[2]
(National Institute of Advanced Industrial Science and Technology (AIST), Japan)

P3-20   Visually induced motion sickness breaks the synchronization of fMRI time-series from the left and right human MT+
Jungo Miyazaki[1], Hiroki Yamamoto[2], Yoshikatsu Ichimura[1], Hiroyuki Yamashiro[2], Tomokazu Murase[3], Masahiro Umeda[3], Toshihiro Higuchi[3]
([1]Canon Inc., Japan, [2]Kyoto University, Japan, [3]Meiji University of Integrative Medicine, Japan)

## *Visual Recognition*

P3-21  Estimation of functional specificity of visual areas by a transverse relaxation profile

Daehun Kang[1,2], Yulwan Sung[1], Satoshi Shioiri[2], Seiji Ogawa[1]

([1]Tohoku Fukushi University, Japan, [2]Tohoku University, Japan)

P3-22  Perceiving group-wide attractiveness for human faces

Hidekazu Yarimizu, Yoshitaka Makino, Jun Kawahara

(Chukyo University, Japan)

P3-23  The temporal dynamics of object detection between target and non-target response by using fragmented object contours

Kosuke Taniguchi

(Doshisha University, Japan)

P3-24  Dynamic face adaptation in facial expression judgment and its position specificity

Yu Ting Lew, Hong Xu

(Nanyang Technological University, Singapore)

P3-25  The effect of verbal overshadowing on face identification — A pilot study

Minje Kim[1], Kyongmee Chung[1], Woo Hyun Jung[2]

([1]Yonsei University, Korea, [2]Chungbuk National University, Korea)

P3-26  Positive eyes facilitate use of pigment and shape information from the rest of the face

Harold C H Hill[1], Sarah Shrimpton[2], Yumiko Otsuka[3], Mark D Shriver[4], Peter D Claes[5]

([1]University of Wollongong, Australia, [2]University of Dundee, UK, [3]UNSW Australia, Australia, [4]The Pennsylvania State University, USA, [5]Katholieke Universiteit Leuven, Belgium)

P3-27  Configural face processing in serial visual presentation

Jasmina Stevanov[2], Zorica Stevanov[1], Dejan Todorovic[1]

([1]University of Belgrade, Serbia, [2]Kyoto University, Japan)

P3-28  Visual field coverage of category selective regions in human visual cortex estimated using pRF mapping

Nathan Witthoft[1], Mai Nguyen[2], Sonia Poltoratski[3], Golijeh Golarai[1], Alina Liberman[4], Karen F LaRocque[1], Mary E Smith[4], Kalanit Grill-Spector[1]

([1]Stanford Unviersity, USA, [2]New York University, USA,[3]Vanderbilt University, USA, [4]University of California, Berkeley, USA)

P3-29  Importance of the stimulus intensity in perceptual adaptation

Dayi Jung, Euihyun Kwak, Kyongmee Chung

(Yonsei University, Korea)

## *Visual Attention, Awareness and Cognition*

P3-30  Rapid and efficient processing of frequently-used meaningful visual symbols

Naoto Sakuma, Eiji Kimura, Ken Goryo

(Chiba University, Japan)

P3-31  Inhibition of return to eye gaze develops in teenage

Hui Fang Lin[1], Li Jingling[2], Chih Chien Lin[3], Chia Jui Tsai[4], Yen Ching Wu[3], Joung Kung Yih[3], Lin Me Chen[3], Wan Ru Tzeng[3], Mei Jung Chen[3]

([1]National Changhua University of Education, Taiwan, [2]China Medical University, Taiwan, [3]Taichung Veterans General Hospital, Taiwan,[4]Changhua Christian Hospital, Taiwan)

P3-32　Moderate transient noise improves response inhibition in children with attention-deficit/hyper-activity disorder

Yi-Min Tien[1], Yu-Shu Liang[1], Hisn-Wei Wu[1], Jeng-Yi Tyan[2], Tun-Shin Lo[1],
Kuo-You Huang[1], Li-Chuan Hsu[3], Vincent Chin-Hung Chen[1,2]
([1]Chung Shan Medical University, Taiwan, [2]Chung Shan Medical University Hospital, Taiwan,
[3]China Medical University, Taiwan)

P3-33　Longer stimulus presentation decreases the magnitude of cross-domain priming

Kiyofumi Miyoshi, Hiroshi Ashida
(Kyoto University, Japan)

P3-34　Qigong dandao meditation improves visual attention

Weilun Chou, Min-Hui Tsai
(Fo Guang University, Taiwan)

P3-35　Sequence effects of symbolic cueing: the role of voluntary control and attentional control settings

Qian Qian, Raodong Yu, Feng Wang
(Kunming University of Science and Technology, China)

P3-36　Spatial spread of visual attention while tracking a moving object

Kei Ishii, Kazumichi Matumiya, Ichiro Kuriki, Satoshi Shioiri
(Tohoku University, Japan)

P3-37　Studying effects of shifting gaze with subtle visual stimuli during driving

Kohei Oka[1], Yusuke Sugano[1], Yoichi Sato[1], Akihiro Sugimoto[2], Toshiyuki Kondo[3],
Keisuke Hachisuka[3], Katsunori Abe[3], Eiichi Okuno[3]
([1]The University of Tokyo, Japan, [2]National Institute of Informatics, Japan,
[3]DENSO Co., Japan)

P3-38　Relationships between emotions and colors: A comparison between Japanese and Chinese

XiangYuan Zeng, Kana Kuraguchi, Hiroshi Ashida
(Kyoto University, Japan)

P3-39　Understandability and aesthetic preference in diagram design: A case study on the design of visual pathway diagrams

Yu-Ying Lin, Hiroshi Ashida
(Kyoto University, Japan)

P3-40　Synesthetic colors affect visuospatial working memory

Hiroyuki Mitsudo, Yukiko Nishi
(Kyushu University, Japan)

### Interactive Vision

P3-41　Action comparison influences size perception

Wenbo Luo[1], Yongning Song[1,2], Kayo Miura[1]
([1]Kyushu University, Japan, [2]East China Normal University, China)

P3-42　Bouba/Kiki effect in deaf people

Shuichiro Taya
(Taisho University, Japan)

P3-43　Interference of manual reactions by concurrent saccades

Hiroshi Ueda, Kohske Takahashi, Katsumi Watanabe, Yasushi Yamaguchi
(The University of Tokyo, Japan)

P3-44 Infants' preference for female face enhanced by odor

Ayanori Tanaka[1], So Kanazawa[2], Masami K Yamaguchi[1]

([1]Chuo University, Japan, [2]Japan Women's University, Japan)

P3-45 The dilations and compressions of the interval-time perception caused by visual flickers and auditory flutters

Kenichi Yuasa[1,2], Yuko Yotsumoto[1]

([1]The University of Tokyo, Japan, [2]Japan Society for the Promotion of Science (JSPS), Japan)

# Tuesday, July 22 (Day 4)

8 : 30 – 10 : 30　**Symposium 4A**　*Temporal Recalibration*　*Kagawa International Conference Hall*
Organizer: Derek Arnold
(The University of Queensland, Australia)

S4A-1　Adaptation to asynchronous audiovisual events occurs rapidly
Erik Van der Burg[1], David Alais[1], John Cass[2]
([1]University of Sydney, Australia, [2]University of Western Sydney, Australia)

S4A-2　Temporal recalibration of physical and neural time lags
Shinya Yamamoto
(National Institute of Advanced Science and Technology, Japan)

S4A-3　On the function and mechanisms of adaptation in relative timing perception
Warrick Roseboom
(NTT Communication Science Laboratories, Japan)

S4A-4　Assessing proposed explanations of audio-visual temporal recalibration
Kielan Yarrow
(City University London, UK)

8 : 30 – 10 : 30　**Symposium 4B:** *Infant Visual Perception and Beyond: Motion, Color, Object, and Face Perception, and Cross-modal Rule Learning*
*Conference Room 61*
Organizer: Yumiko Otsuka
(UNSW Australia, Australia)

S4B-1　Development of categorical color perception in infants
Jiale Yang[1], So Kanazawa[2], Masami K Yamaguchi[1], Ichiro Kuriki[3]
([1]Chuo University, Japan, [2]Japan Women's University, Japan, [3]Tohoku University, Japan)

S4B-2　Changes in radial optic flow perception precede the development of voluntary locomotion
Nobu Shirai[1], Tomoko Imura[2]
([1]Niigata University, Japan, [2]Niigata University of International and Information Studies, Japan)

S4B-3　Temporal dynamics of spatial frequency processing for objects and faces in infants
Yumiko Otsuka[1], Hiroko Ichikawa[2,3], So Kanazawa[4], Masami K Yamaguchi[2], Branka Spehar[1]
([1]UNSW Australia, Australia, [2]Chuo University, Japan,
[3]Japan Society for the Promotion of Science (JSPS), Japan,
[4]Japan Women's University, Japan)

S4B-4　Specialization and generalization in perceptual development: The case of the other-race effect in the first year of life
Sarina Hui-Lin Chien[1], Tsung-Ren Huang[2], Jing-Fong Wang[1]
([1]China Medical University, Taiwan, [2]National Taiwan University, Taiwan)

S4B-5　Infant cross-modal learning
Hiu Mei Chow[1,2], Angeline Sin-Mei Tsui[1,3], Yuen Ki Ma[1], Mei Ying Yat[1], Chia-huei Tseng[1]
([1]University of Hong Kong, Hong Kong, [2]University of Massachusetts Boston, USA,
[3]University of Ottawa, Canada)

10 : 45 – 11 : 45 **Keynote Lecture 2**   *Kagawa International Conference Hall*

Illusory movements

Stuart Anstis
(University of California, San Diego, USA)
Moderator: Hiroyuki Ito
(Kyushu University, Japan)

11 : 45 –   **Business meeting & Closing remarks**

12 : 15 –   **Excursion**