



## FECHNER DAY 2017

### Conference Proceedings

The 33rd Annual Meeting of the International Society for  
Psychophysics

Sunday to Thursday, 22–26 October 2017

Kyōsō-kan and Hon-kan, Denki Building, Fukuoka, Japan

Organized by

Research Center for Applied Perceptual Science (ReCAPS)  
Kyushu University

**ReCAPS**

Sponsored by

**FCVB** 公益財團法人 福岡觀光コンベンションビューロー<sup>®</sup>  
Fukuoka Convention & Visitors Bureau



**KYUSHU**  
UNIVERSITY



*Proceedings of the 33rd Annual Meeting of the International Society for Psychophysics*

## **Fechner Day 2017**

Fukuoka, Japan  
22–26 October 2017

**How to cite this book:** Kazuo Ueda, Hiroyuki Ito, Gerard B. Remijn, and Yoshitaka Nakajima (Eds.) *Fechner Day 2017: Proceedings of the 33rd Annual Meeting of the International Society for Psychophysics*. International Society for Psychophysics, Fukuoka, Japan, 2017.

**Distribution:** International Society for Psychophysics, c/o Kazuo Ueda, Department of Human Science, Kyushu University, 4-9-1 Shiobaru Minami-ku, Fukuoka 815-8540, Japan.

L<sup>A</sup>T<sub>E</sub>X typeset by Kazuo Ueda.

Printed by Kijima Printing Inc., 2-9-6 Shirogane, Chuo-ku, Fukuoka-shi, Fukuoka 810-0012, Japan.

All rights reserved. The copyright for individual papers belongs to their respective authors. No part of this book may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, record or by any information storage and retrieval system, without permission in writing from the authors.

# International Society for Psychophysics

Founded in Cassis, France, 22 October 1985.

## Executive Committee 2017–2018

<b>President</b>	John Monahan ( <i>Central Michigan University, Mount Pleasant, USA</i> )
<b>Vice-President</b>	Friedrich Müller ( <i>Leuphana University Lüneburg, Lüneburg, Germany</i> )
<b>Treasurer</b>	Wolfgang Ellermeier ( <i>Technische Universität Darmstadt, Darmstadt, Germany</i> )
<b>Secretary</b>	Timothy Hubbard ( <i>Arizona State University, Tempe, AZ, USA</i> )

## Organizing Committee of Fechner Day 2017

<b>Chair</b>	Yoshitaka Nakajima ( <i>Kyushu University, Fukuoka, Japan</i> )
	Kazuo Ueda ( <i>Kyushu University, Fukuoka, Japan</i> )
	Gerard B. Remijn ( <i>Kyushu University, Fukuoka, Japan</i> )

## Program Committee of Fechner Day 2017

<b>Chair</b>	Hiroyuki Ito ( <i>Kyushu University, Fukuoka, Japan</i> )
	Valter Ciocca ( <i>University of British Columbia, Vancouver, Canada</i> )
	Mark A. Elliott ( <i>National University of Ireland, Galway, Ireland</i> )
	Hiroyuki Mitsudo ( <i>Kyushu University, Fukuoka, Japan</i> )
	Yoshitaka Nakajima ( <i>Kyushu University, Fukuoka, Japan</i> )
	Gerard B. Remijn ( <i>Kyushu University, Fukuoka, Japan</i> )
	Kazunori Shidoji ( <i>Kyushu University, Fukuoka, Japan</i> )
<b>Editorial Chief</b>	Kazuo Ueda ( <i>Kyushu University, Fukuoka, Japan</i> )
	Yuki Yamada ( <i>Kyushu University, Fukuoka, Japan</i> )
	Kentaro Yamamoto ( <i>Kyushu University, Fukuoka, Japan</i> )

## Public Relations Committee of Fechner Day 2017

<b>Chair</b>	Takeharu Seno ( <i>Kyushu University, Fukuoka, Japan</i> )
	Chihiro Hiramatsu ( <i>Kyushu University, Fukuoka, Japan</i> )
	Hidetoshi Kanaya ( <i>Aichi Shukutoku University, Aichi, Japan</i> )
	Wataru Teramoto ( <i>Kumamoto University, Kumamoto, Japan</i> )

## Advisory Board of Fechner Day 2017

Lihan Chen ( <i>Peking University, Beijing, China</i> )
Simon Grondin ( <i>Laval University, Québec, Canada</i> )
Friedrich Müller ( <i>Leuphana University Lüneburg, Lüneburg, Germany</i> )

## Past Annual Meetings

<b>Year</b>	<b>Venue</b>	<b>Organizer(s)</b>
1985	Marseille, France	G. Canévet and B. Scharf
1986	Cassis, France	A. M. Bonnel, G. Canévet, C.-A. Possamaï, B. Scharf, B. Berglund, U. Berglund, and R. Teghtsoonian
1987	Durham, NH, USA	M. Teghtsoonian and R. Teghtsoonian
1988	Stirling, Scotland	H. Ross, R. Macdonald, C.-A. Possamaï, R. Teghtsoonian, M. Treisman, and R. Warren
1989	Cassis, France	A. M. Bonnel, G. Canévet, C.-A. Possamaï, and B. Scharf
1990	Würzburg, Germany	F. Müller
1991	Durham, NH, USA	G. R. Lockhead
1992	Stockholm, Sweden	G. Borg, Å. Hellström, and G. Neely
1993	Mallorca, Spain	A. Garriga-Trillo, P. R. Miñón, C. Carcía-Gallego, P. Lubin, J. M. Merino, M. J. Rubio-Gómez, and A. Villario
1994	Vancouver, Canada	L. M. Ward
1995	Cassis, France	C.-A. Possamaï, H. Ross, B. Scharf, R. Teghtsoonian, and L. M. Ward
1996	Padua, Italy	S. C. Masin
1997	Poznan, Poland	R. Gotebiewski, E. Hojan, T. Hornowski, P. Kokowski, A. Majchrzak, P. Miecznik, M. Labowski, P. Pekala, A. Preis, E. Skrodzka, E. Wichlinska, and A. Wicher
1998	Québec, Canada	S. Grondin, Y. Lacouture, and R. Rousseau
1999	Tempe, AZ, USA	P. R. Killeen and W. R. Uttal
2000	Strasbourg, France	C. Bonnet
2001	Leipzig, Germany	E. Sommerfeld, R. Kompass, and T. Lachmann
2002	Rio de Janeiro, Brazil	J. A. da Silva, E. H. Matsushima, and N. P. Ribero-Filho
2003	Larnaca, Cyprus	B. Berglund and E. Borg
2004	Coimbra, Portugal	A. Olivera, M. Teixeira, G. F. Borges, and M. J. Ferro
2005	Traverse City (MI), USA	J. S. Monahan, S. M. Sheffert, and J. T. Townsend
2006	St Albans, UK	D. E. Kornbrot, R. M. Msetfi, and A. W. McRae
2007	Tokyo, Japan	S. Mori, T. Miyaoka, and W. Wong
2008	Toronto, Canada	B. A. Schneider, B. M. Ben-David, S. Parker, and W. Wong
2009	Galway, Ireland	M. A. Elliott, S. Antonijević, S. Berthaud, P. Mulcahy, C. Martyn, B. Bargary, and H. Schmidt
2010	Padua, Italy	A. Bastianelli, G. Vidotto, L. Filipponi, D. Polezzi, A. Spoto, D. Massidda, and M. Scandola
2011	Herzliya, Israel	D. Algom, D. Zakay, E. Chajut, S. Shaki, Y. Mama, and V. Shakuf
2012	Ottawa, Canada	S. R. Carroll, E. Gallitto, C. Leth-Steenensen, W. M. Petrusic, J. R. Schoenherr, and D. A. Verger
2013	Freiburg, Germany	J. Wackermann, M. Wittmann, and W. Skrandies

<b>Year</b>	<b>Venue</b>	<b>Organizer(s)</b>
2014	Lund, Sweden	G. R. Patching, Å. Hellström, M. Johnson, E. Borg, and R. Bååth
2015	Québec, Canada	S. Grondin, V. Laflamme, G. Plante, L. Azari, and M.-L. Roy
2016	Moscow, Russia	I. G. Skotnikova, A. N. Gusev, G. Y. Menshikova, I. Blinnikova, O. Korolkova, S. A. Emelianova, V. M. Shendyapin, V. E. Doubrovski, A. I. Kovalev, A. Kremlev, and N. N. Volkova



## Contents

Welcome to Fukuoka!	1
<b>I Keynote Lecture 1</b>	<b>3</b>
Visual psychophysics with natural images Isamu Motoyoshi	5
<b>II Symposium 1—Time in Perception and the Brain</b>	<b>9</b>
Introduction	11
Does the missed frame in viewing RSVP display affect the perceived duration? Makoto Ichikawa	12
The effect of numerical magnitudes on the perceived duration of multi-digit or single-digit intervals Vincent Laflamme and Simon Grondin	16
Vision at the present moment: Visual feature integration over space and time in peripheral vision Masahiko Terao	17
Time in the brain: Neuronal coding of duration Masamichi J. Hayashi	18
<b>III Keynote Lecture 2</b>	<b>19</b>
Processing spoken words in a second language: Competition, prediction, and alignment Robert J. Hartshuiker	21
<b>IV Free Talk Session 1</b>	<b>23</b>
Conversational styles of Japanese- and English-speaking children and parents Yuko Yamashita and David Hirsh	25
Auditory objects represented as temporal, spectral, and spatial modulation density patterns: A theoretical study Pierre L. Divenyi	26
<b>V Free Talk Session 2</b>	<b>29</b>

Apparent time compression for slow-motion stimuli Saya Kashiwakura and Isamu Motoyoshi	31
Causality replaces perceived timing of two events: Investigation of the competition of multiple causal contexts in a single sequence Hiroyuki Umemura	32
<b>VI Free Talk Session 3</b>	<b>37</b>
Representational momentum and anisotropy in visual space Timothy L. Hubbard and Susan E. Ruppel	39
Ebbinghaus illusion in contrast-defined and texture-defined stimuli Sofia Lavrenteva and Ikuya Murakami	40
Intelligibility of English noise-vocoded speech resynthesized from spectral-change factors Takuya Kishida, Yoshitaka Nakajima, Kazuo Ueda, Gerard B. Remijn, Sophia Arndt, and Mark A. Elliott	41
Irrelevant sound effects with locally time-reversed speech Wolfgang Ellermeier, Florian Kattner, Kazuo Ueda, and Yoshitaka Nakajima	42
<b>VII Free Talk Session 4</b>	<b>49</b>
John Swets, ROC curves, and fifty years of signal detection theory and psychophysics Roger D. Adams, Gordon Waddington, Nili Steinberg, and Jia Han	51
Gray color categorical perception: Asymptotics of psychometric function and mean decision time Ren Namae, Marie Watanabe, and Ihor Lubashevsky	57
Subjective confidence in perceptual categorization: Altering performance asymptotes increases overconfidence Jordan Richard Schoenherr and Guy Lacroix	63
Capturing decision confidence through response trajectories and willingness to gamble Arkady Zgonnikov, Aisling Kenny, Denis O'Hora, and KongFatt Wong-Lin	70
<b>VIII Free Talk Session 5</b>	<b>75</b>
Effect of sound on memory and impressiveness of visual imagery Natalia Postnova and Shin-ichiro Iwamiya	77

Investigating differences in the dynamic-systems structure of auditory cognition as a function of music training Naomi du Bois, José M. Sanchez Bornot, KongFatt Wong-Lin, Mark A. Elliott, and Girijesh Prasad	84
Some temporal characteristics of music cognition Mark A. Elliott, Deirdre Farrell, Caitríona Eames, and Naomi du Bois	91
<b>IX Poster Session 1</b>	<b>99</b>
P1-1. Scaling depression with psychophysical scaling: A comparison between the Borg CR Scale <sup>®</sup> (CR100, centiMax <sup>®</sup> ) and PHQ-9 on a non-clinical sample Elisabet Borg and Jessica Sundell	101
P1-2. Using psychophysical scaling, the Borg centiMax Scale <sup>®</sup> (CR100), in questionnaires to study work-related needs and behaviors Elisabet Borg, Johanna Andersson, and Elin Wigert	108
P1-4. A CNV analysis of the discrimination of very short time intervals Takako Mitsudo, Naruhito Hironaga, and Simon Grondin	115
P1-5. Is the acoustic language universal really universal? Yoshitaka Fujii, Yoshitaka Nakajima, Takuya Kishida and Takeharu Seno	116
P1-6. Effects of sound marker durations on the perception of inter-onset time intervals: A study with real and synthesized piano sounds Emi Hasuo, Yoshitaka Nakajima, Michiko Wakasugi, and Takuya Fujioka	117
P1-8. ERP correlates of sensory facilitation after exposure to delayed auditory feedback Yoshimori Sugano, Jeroen Stekelenburg, Frouke de Schipper, and Jean Vroomen	118
P1-9. Specificity of perceptual learning in an auditory interval categorization task depending on the decision rule Florian Kattner	119
P1-10. The perception of auditory icons by Japanese drivers João Paulo Cabral, Yoshitaka Nakajima, Kazuo Ueda, and Gerard B. Remijn	125
P1-11. Perceptual restoration of interrupted locally time-reversed speech Kazuo Ueda, Nozomi Inui, Kaisei Shiraki, Valter Ciocca, Yoshitaka Nakajima, and Gerard B. Remijn	126
P1-12. Influence of the temporal-unit duration on the intelligibility of	

mosaic speech: A comparison between Japanese and English Kaori Kojima, Yoshitaka Nakajima, Kazuo Ueda, Gerard B. Remijn, Mark A. Elliott, and Sophia Arndt	127
P1-13. The effect of virtual eyes on psychological nervousness of public speakers Miharu Fuyuno, Yuko Yamashita, and Yoshitaka Nakajima	128
P1-14. Critical thinking in two languages: Bilingualism and second lan- guage competency as determinants of performance Sophia Arndt, Ethan Keeney, Kaori Kojima, Sarah Volkmer, Zhimin Bao, Shimeng Liu, Stanislava Antonijevic, Yoshitaka Nakajima, and Mark A. Elliott	132
P1-15. Uniqueness of the gaze cue in spatial anisotropy of visual attention Hirokazu Eito and Akio Wakabayashi	139
P1-16. Momentarily viewing an averted gaze shifts visual attention Masaki Ogawa, Hiroyuki Ito, and Shoji Sunaga	140
P1-17. Interocular independence of attention in pigeons Aya Kokubu and Kazuo Fujita	141
P1-18. Factors affecting the peripheral flicker illusion Hiroyuki Ito and Tomomi Koizumi	142
P1-19. Visual system resists vertical horizontal illusion and Ponzo illusion by mathematic observation Masahiro Ishii	143
P1-20. Sentiment analysis on associated colours by listening synthesized speech Atsuya Suzuki, Win Thuzar Kyaw, and Yoshinori Sagisaka	144
P1-21. A case study on synesthesia: Is there a connection between Japanese hiragana-katakana articulation categories and color grouping? Miki Hokajo, Yoshitaka Nakajima, Kazuo Ueda, Chihiro Hiramatsu, Moe Nishikawa, and Gerard B. Remijn	150
P1-22. Personal space during obstacle avoidance: The effect of avoidance direction Kotaro Shimizu, Yusuke Kondo, Yuriko Kihara, Kazunari Ito, Keita Tai, Takahiro Higuchi, and Taketo Furuna	151
P1-23. Lateral margin when walking through an aperture created by a person and a wall Kazunari Ito, Kotaro Shimizu, Toshiyuki Kikuchi, Yusuke Kondo, Yuriko Kihara, Keita Tai, Takahiro Higuchi, and Taketo Furuna	155
P1-24. The location of visual feedback influences perceived action-outcome	

interval Kentaro Yamamoto	156
P1-25. Where and when did it bounce? Junji Yanagi and Makoto Ichikawa	157
P1-26. Multi-stable motion perception in the Polka Dance stimulus Hiroaki Yano, Yoshitaka Nakajima, Kazuo Ueda, Tatsuya Yoshizawa, and Gerard B. Remijn	163
P1-27. Pre-presentation of random motion reduces the latency ofvection Jing Ni, Hiroyuki Ito, Masaki Ogawa, and Shoji Sunaga	164
P1-28. Inhibition ofvection by object grasping movement Masaki Mori and Takeharu Seno	165
P1-29. Dissociation between perception and action in induced motion: A comparison between tennis players and novices Yasuhiro Seya and Hiroyuki Shinoda	166
P1-30. Discrimination of vehicle speeds by standing watchers Bruno de Araújo Faria and Ricardo Kamizaki	171
P1-32. A new affective measurement with a joystick reveals temporal char- acteristics of audio-visual interaction in film viewing Masaharu Nomura and Hiroshi Arao	178
P1-33. The effects of sound frequency on sound-induced flash illusion Yu Masago, Takuma Matumura, Yuta Tamai, Takafumi Furuyama, Shizuko Hiryu, and Kohta I. Kobayashi	179
P1-34. Neurophysiological method for unrevealing the audio-visual inte- gration in Mongolian gerbil Yuki Ito, Takafumi Furuyama, Shizuko Hiryu, and Kohta I. Kobayashi	183
P1-35. Cross-modal effect of a synthetic speech continuum on the judgment of a visual object's size Sachi Itagaki, Hikari Oonishi, Shizuko Hiryu, and Kohta I. Kobayashi	188
P1-37. Does face color facilitate to judge the facial expression? Fumiyo Takahashi and Yasuhiro Kawabata	193
P1-40. Study on the criteria for artistic activities by people with disabil- ities: Verification of the criteria lists by subjective evaluation test for the experts Tsukasa Muraya, Takeharu Seno, and Yasuyuki Hirai	199
<b>X Poster Session 2</b>	<b>201</b>

P2-1. Can the delay time of subject's response be a true component of the theory of human intermittent control? Takashi Suzuki and Ihor Lubashevsky	203
P2-2. Web site for teaching psychophysical methods with mobile devices Kenzo Sakurai, William H.A. Beaudot, and Hiroshi Ono	208
P2-4. The relationship between the filled duration illusion and the time dilation illusion Erika Tomimatsu, Yoshitaka Nakajima, Mark A. Elliott, Hiroyuki Ito, and Takuya Kishida	209
P2-5. Estimating visual average and numerical average across time Hiromi Sato and Isamu Motoyoshi	210
P2-7. Effects of cochlear delay on perception of simultaneity for two pure tones Satoshi Okazaki and Makoto Ichikawa	211
P2-10. Three-dimensional shape recognition by ultrasonic binaural echoes Miwa Sumiya, Taito Banda, Kaoru Ashihara, Kohta I. Kobayasi, Kazuki Yoshino, Masaki Gogami, Yoshiki Nagatani, Yoshiaki Watanabe, and Shizuko Hiryu	215
P2-11. Irrelevant sound effects with locally time-reversed speech: Real performance difference between German and Japanese native speakers? Kazuo Ueda, Akie Shibata, Yoshitaka Nakajima, Katharina Rost, Florian Kattner, and Wolfgang Ellermeier	222
P2-12. Speech encoding scheme for hearing aid with infrared laser Yuta Tamai, Kazuyuki Matsumoto, Makoto Arimura, Shizuko Hiryu, and Kohta I. Kobayashi	223
P2-13. Temporal resolution needed for auditory communication: Measurement with mosaic speech Yoshitaka Nakajima, Mizuki Matsuda, Kazuo Ueda, and Gerard B. Remijn	229
P2-14. Influence of articulatory suppression on Corsi block task: A psychophysical analysis Shota Mitsuhashi, Shogo Hirata, and Hideyuki Okuzumi	230
P2-15. The detection time for human with different orientation views in natural scenes: Evidence from an ultra-rapid detection task Ryo Tachibana and Keiyu Niikuni	232
P2-16. A collective "phototaxis" of a soldier crab Shusaku Nomura and Haruna Kawai	233
P2-17. Temporal continuity of vision and cyclic binding of position and	

object at theta rhythm Ryohei Nakayama and Isamu Motoyoshi	234
P2-19. Does emotional valence and arousal affect temporal resolution of vision? Misa Kobayashi and Makoto Ichikawa	235
P2-20. Color-temperature association in dichromatic and trichromatic individuals Yuki Mori and Chihiro Hiramatsu	240
P2-26. Measurement ofvection strength induced byvection scenes in the Japanese animations Kousuke Tokunaga, Yoshitaka Fujii, Masaki Ogawa, Satoshi Ikehata, Tomohiro Masuda, and Takeharu Seno	241
P2-27. Effect of frame rate onvection strength Yoshitaka Fujii, Takeharu Seno, and Robert S. Allison	242
P2-28. Development of asymmetry invection for expansion/contraction radial optic flows Nobu Shirai, Shuich Endo, Shigehito Tanahashi, Takeharu Seno, and Tomoko Imura	243
P2-29. Postural instability predicts the likelihood, but not the severity, of cybersickness inHMDs Stephen Palmisano, Benjamin Arcioni, Juno Kim, Deborah Apthorp, and Paul Stapley	244
P2-30. Viewing hand motion can elicit tickle sensation Godai Saito, Reo Takahashi, and Jiro Gyoba	245
P2-32. Visual working memory representation of compound stimuli: Effects of audiovisual interaction at different virtual distances Qiongyu Wang and Lihan Chen	246
P2-33. Learning arbitrary associations between visual and tactile features Ryo Teraoka and Wataru Teramoto	253
P2-34. Geometric shapes modulate the visual illusion induced by sound Yasuhiro Takeshima	260
P2-35. Conflict monitoring enhancement with short duration deep breathing: An event-related potential study Kok Suen Cheng, Yun Fah Chang, and Poh Foong Lee	267
P2-37. Eye movements and lie detection Yulia V. Bessonova and Svetlana Pezchikova	274
P2-39. Paradoxical relationship between salivary oxytocin concentration and aesthetic preference for drawings: A preliminary study	

Hirokazu Doi and Kazuyuki Shinohara	280
<b>XI Free Talk Session 6</b>	<b>283</b>
Temporal ensemble coding of sub-second auditory beeps: A MEG study Lu Guo, Ming Bao, and Lihan Chen	285
Phonology and psychophysics: Is sonority real? Yoshitaka Nakajima, Kazuo Ueda, Gerard B. Remijn, Yuko Yamashita, and Takuya Kishida	292
Measurements of the velvet hand illusion Tetsu Miyaoka	293
<b>XII Free Talk Session 7</b>	<b>299</b>
Using the effects of foreperiod-variation on readiness to break in driving simulation Friedrich Müller and Wiebke Melcher	301
Accuracy and latency of kicking foot identification for football opponents in relation to team familiarity and game experience Benjamin B. Moore, Roger D. Adams, Nicholas J. O'Dwyer, Kylie A. Steel, and Stephen Cobley	305
Characteristics of simultaneous tapping by different hands/feet Yoshiyuki Sato, Kaori Sakai, Eriko Aiba, and Yutaka Sakaguchi	312
The importance of vestibular input and the environment to early child development as determined through psychophysical principles Patricia Hannan, Millard F. Reschke, and Eugene Galanter	318
<b>XIII Symposium 2—The 2nd International Five-Sense Sym- posium</b>	<b>319</b>
Introduction	321
Tactile images for the visually impaired visitors of museums Wenzhen Yang, Jiali Luo, Xinli Wu, Zhaona Jiang, and Ke Qiu	322
Odor-induced arousal dissociates from perceived olfactory intensity and valence Wei Chen, Fangshu Yao, Bin Zhou, and Wen Zhou	330
The multisensory nature of the body: Insights from the moving rubber hand illusion Andreas Kalckert	331

Detecting a touch that wasn't there: Introducing the somatic signal detection task (SSDT) in examining sensory integration Treshi-Marie Perera	332
Multisensory integration and teleoperation in virtual reality Lihan Chen, Qiongyu Wang, Nicholas Katzakis, Frank Steinicke, and Fang Fang	333
Evaluation of food crispness by using sound emission during biting or chewing Takahisa Nishizu	337
Visual analysis, modulation, and crossmodal effect of food appearance Katsunori Okajima	338
Taste sensor: Electronic tongue to quantify taste Kiyoshi Toko	339
Odor sensing, visualization, and application Kenshi Hayashi	340
<b>XIV Free Talk Session 8</b>	<b>345</b>
A new probabilistic approach to describing the stream of decision-making events near perception threshold Ihor Lubashevsky and Kosuke Hijikata	347
An object-free algorithm for generating biological motion stimuli from natural movies Wataru Suzuki, Noritaka Ichinohe, Hiroshige Takeichi, Atsuko Gunji, and Masumi Inagaki	352
<b>XV Symposium 3—The Future of Vection</b>	<b>357</b>
Introduction	359
Self-motion perception facilities at York University Robert S. Allison, Laurence R. Harris, and Michael R.M. Jenkin	360
Phenomenological approach tovection Takeharu Seno, Kayoko Murata, and Hidemi Komatsu	362
Individual differences in postural stability predict bothvection and simulator sickness Stephen Palmisano, Ben Arcioni, and Paul Stapley	363
Effects of foot-stimulation (vibrations and a water flow) onvection Yasuaki Tamada, Kiyoshiro Hara, Yoshitaka Fujii, Takeharu Seno, and Masayuki Sato	368

<b>XVI Free Talk Session 9</b>	<b>377</b>
Adaptive function of color vision in primates Chihiro Hiramatsu	379
Perceptual organization from visual positions distorted by motion signals in drifting Gabor patches Hoko Nakada, Daisuke Hayashi, and Ikuya Murakami	380
Reducing between-subject variation in motion-induced blindness using the method of constant stimuli Amanda I. LeBel, Hanne K. Hansen, Nicholas C. Duggan, Alison Meurer, Emma G. DePierro, Stephen Z. Zhang, Andrew J. Kitt, and Wm Wren Stine	381
<b>XVII Free Talk Session 10</b>	<b>389</b>
Bukimi no tani: The effects of regulatory foci on response threshold and its effect on cognitive and affective uncertainty Jordan Richard Schoenherr and Tyler Burleigh	391
The effect of facial attractiveness on face perception under binocular rivalry Hidetoshi Kanaya, Takeharu Seno, Masayoshi Nagai, and Takao Sato	398