

Oral Presentation

[VHF5]Physiological and Psychophysical Factors

Chair: Hiroyasu Ujike (AIST)

Co-Chair: Masamitsu Harasawa (NHK)

Thu. Nov 28, 2019 5:20 PM - 6:40 PM Mid-sized Hall A (1F)

5:20 PM - 5:45 PM

[VHF5-1(Invited)]A Modeling Approach to Investigate the Relationship Between Motion Sickness Severity and Visual Motion

*Akira Tanaka¹, Norihiro Sugita², Makoto Yoshizawa², Tomoyuki Yambe² (1. Fukushima University (Japan),
2. Tohoku University (Japan))

Keywords: Motion sickness, Autonomic nervous system, Nonlinear modeling, Video global motion

In this study, dynamic characteristics between image motion and severity of visually induced motion sickness (VIMS) was modeled as a Hammerstein model, which consists of a static nonlinear function followed by a linear system. The results indicate the change in subjective VIMS score may be estimated from image motions.