# Emotional-perception-control technology

IOWN Evolution Project Metaverse - Fusion of Real and Virtual -



### Background

Virtual live performances by VTubers are gaining momentum, and the demand is expected to grow even more as VR devices evolve. However, in entertainment in the cyber world, mechanisms for fostering and communicating emotions such as togetherness and enthusiasm still need to be improved.

## Summary

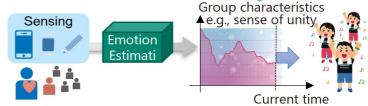
To realize emotional experiences in cyber entertainment that surpass those in the real world, we are working to elucidate emotional characteristics related to feelings of unity and enthusiasm, emotion estimation technology, and control technology to guide emotions in the desired direction.

■ Emotion control by virtual audience using synchronous model



⇒ Confirmed improved feeling of unity through experimentation

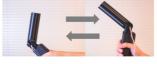
**■ Emotion estimation from sensing data** 



Estimation of the characteristics of human emotions such as sense of unity and enthusiasm from sensing data collected through wearable devices.

⇒ Use estimation results for emotion control

# Emotion control by force feedback light stick



Original device that provides force feedback ⇒ Confirmed the possibility of emotional reinforcement

#### **Features**

- Emotion estimation technology that understands and estimates the characteristics of human emotions from sensing data collected through wearable devices
- Emotion control technology that guides emotion to a desirable state for the user by controlling perceptual stimuli such as vision and force sensation by emotional characteristics
- Generation of personalized virtual venues optimized for each individual's enjoyment by emotion control based on the results of emotion estimation for each user

#### Future benefits

Through this research, we can expand emotional experiences beyond initial expression and control individual emotions.

## Exhibiting Company

NIPPON TELEGRAPH AND TELEPHONE CORPORATION

#### Contact

rdforum-exhibition@ml.ntt.com