ACM ISS 2021 WORKSHOP – PROGRAMME

PHASE 1: INVITED KEYNOTES & POSITION PAPER PRESENTATIONS	
09:00 – 09:10	Introduction
09:10 – 09:40	**Keynote Mark Billinghurst (V):** Research Directions in Transitional Interfaces
09:40 – 09:50	**Alexander Gall (V):** Cross Virtuality Analytics in Materials Sciences
09:50 – 10:00	**Troels Rasmussen (P):** Challenges and Goals of XR Transitional Interfaces in Industry 4.0

coffee break (10 min)

PHASE 1: INVITED KEYNOTES & POSITION PAPER PRESENTATIONS	
10:10 – 10:20	**Sebastian Hubenschmid (V):** Towards Asynchronous Hybrid User Interfaces for Cross-Reality Interaction
10:20 – 10:30	**Judith Friedl (P):** Germane Elements for the Evaluation of Transitional Interfaces
10:30 – 10:40	**Fabian Pointecker (P):** A Generic Architecture for Cross-Virtuality
10:40– 10:50	**Andreas Riegler (P):** AutoSimAR: In-Vehicle Cross-Virtuality Transitions between Planar Displays and 3D Augmented Reality Spaces
10:50 – 11:00	**Jingyi Li (P):** Multi-Modal Transition and Traces in Everyday Mobile Virtual Reality

lunch break (40 min)

PHASE 1: INVITED KEYNOTES & POSITION PAPER PRESENTATIONS	
11:40 – 12:10	**Keynote Jan Gugenheimer (V)**: The Future of XR HMD Design
12:10-12:20	**Janine Mayer (P)**: Volumetric Data Interaction in AR and VR Using a Handheld Touch-Sensitive Device
12:20-12:30	**Lauren Thevin (V)**: The challenge of Doppelgangers collaborating in Transitional interfaces: Managing the digital and physical versions of objects and people
12:30– 12:40	**Daniel Schwajda (P)**: Transforming Graph-based Data Visualisations from Planar Displays into Augmented Reality 3D Space
12:40 – 13:10	**Keynote Hans-Christian Jetter (P)**: From Cross-Device to Transitional Interaction

coffee break (20min)

PHASE 2: BREAKOUT GROUPS				
Group	Group 1	Group 2	Group 3	Group 4
Organizers	Mark B. Mohamed K.	Tiare F. Jan-Henrik S.	Christian J.	Christoph A. Jan G.
Modus	*virtual*	*in-person*	*in-person*	*virtual*
Participants	Alexander G. Daniel F. Johannes Z. Mathias L. Sebastian H.	Andreas Riegler Daniel S. Judith F. Linda H.	Fabian P. Janine M. Jingyi L. Troels R.	Andreas Riener Bernhard F. Jonathan W. Lauren T.
Focus topic	User Representation & Awareness Cues		Transitional Objects & Designing for Continuity	

13:30 – 13:45	**Part 0: Introduction of the participants and procedure**
13:45– 14:15	**Part 1: Definition, Taxonomy & Differentiation of Transitional Interfaces** • Collecting concepts that are related to Transitional Interfaces • Identify differences and commonalities between transitional interfaces and related terms and terminologies • Attempting to find a definition for Transitional Interfaces
14:15 – 14:45	**Part 2: Designing Transitional Interfaces** • How can elements of the focus topic be represented or designed in Transitional Interfaces along the RV continuum?
14:45 – 15:15	**Part 3: Evaluating Transitional Interfaces** • How can designs of elements of the focus topic be evaluated? • What are helpful existing models/questionnaires/KPIs?
15:15 – 15:45	**Part 4: Building Transitional Interfaces** • What technologies are suitable for the elements of the focus topic?

coffee break (15min)

PHASE 3: WRAP UP	
16:00 – 16:10	Report Breakout Group 1
16:10 – 16:20	Report Breakout Group 2
16:20 – 16:30	Report Breakout Group 3
16:30 – 16:40	Report Breakout Group 4
16:40 – 17:00	Wrap Up & Discussion about publication options

ACM ISS 2021 WORKSHOP – FOCUS TOPICS

Each breakout group is assigned a focus topic. Based on this topic, participants are asked to work on the questions given in parts 2 to 4 of phase 3 of the workshop. The focus topics should thus allow the topic of Transitional Interfaces to be discussed from different and practice-oriented aspects. The focus topics are dealing with the following questions:

1. **User Representation & Awareness Cues**
   How can users be properly represented in Transitional Interfaces? Which awareness cues can be used to convey workspace awareness or social presence? What can representations look like in co-contexts as well as in cross-contexts? How can users be supported to understand which user is in which context and who is currently transitioning from one to another? How can users be supported while discussing specific data points or shared places together? And what characteristics and behaviours can be captured in different contexts and how can they be visualized?

2. **Transitional Objects & Designing for continuity**
   How can individual objects change their positions on the RV continuum? How can they bridge the virtual and physical world? How can such objects be used as tools or to visualize data? What are the benefits of such objects that can be used and shared by different users at different points in the RV Continuum? How can such objects be designed to take advantage of the different contexts? And on the other side, how can transitions be designed to be as continuous as possible? How can users be supported in the transition in such a way that there are as few cognitive breaks as possible?