

OBJECTIVES

- 1 Develop and integrate new media formats** that deliver high quality photo-realistic content and create a strong feeling of co-presence in coherently integrated experience.
- 2 Adapt the existing production pipeline** to capture and encode multiple media formats and integrate them with state-of-the-art post-production tools.
- 3 Re-Design the distribution chain** so such innovative content format can be orchestrated and delivered in a scalable manner.
- 4 Develop appropriate Quality of Experience (QoE) metrics and evaluation methods** to quantify the quality of these new social VR experiences.
- 5 Maximize the impact of VR-Together** can have on content creators, producers, distributors, tooling companies, service providers and the general audience.

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PARTNERS



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PHOTO-REALISTIC IMMERSIVE CONTENT

VR-Together project aims to offer ground-breaking social Virtual Reality (VR) experiences between users located in remote domestic scenarios, based on photo-realistic immersive content, in a cost-effective manner.

VR-Together's consortium has been strategically set up to consist of partners that cover all stages of the production chain in a well-balanced way.

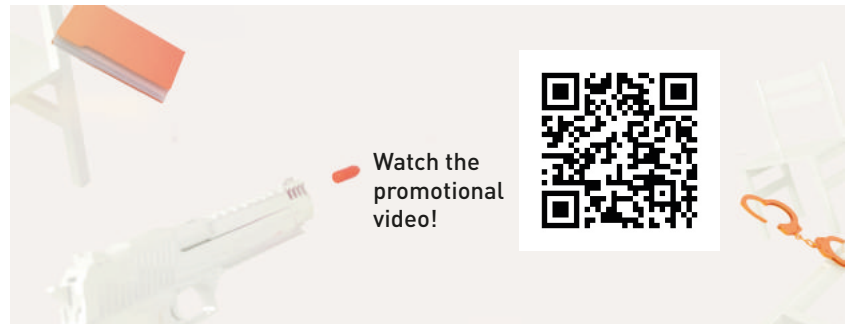
A combination of leading research institutions **i2CAT**, **TNO**, **CWI**, **CERTH**, **Artanim** together with industry actors **Entropy**, **Motion Spell**, **Viaccess-Orca** spread over 4 European countries.

PILOTS

Three pilots, three different episodes of a great story about a murder investigation.

Pilot 1: Police interrogation

Two users watch a police interrogation from the dark side of the room. During the experience, the users can interact and talk about the scene while seeing each other in a photo-realistic quality 3D representation.



Pilot 2: Live scenario

Several users experience a live scenario: they are taken to a news broadcast set where, following the story, the background changes and they can view and examine the crime scene.

Pilot 3: Interactivity

Extending the experience of the other pilots, users interact with the virtual environment with cause-effect actions.



APPLICATIONS & USE CASES

Current Social Virtual Reality applications focus on abstract user representations, with simplified avatar representations.

VR-Together now offers the possibility of meeting friends, family and colleagues with a photo-realistic look-alike representation, which brings better support to a multitude of emerging applications, such as business meetings and educational experiences.



Photo-realistic look-alike avatar

GOOD FOR

- Business meetings
- Family experiences
- Educational purposes
- Social networks
- Entertainment
- Games

MAIN FEATURES

The main characteristics of the **VR-Together** platform are:

- Multimedia delivery chain workflow development
- Live motion capture
- 3D rendering engines
- Encoding and encapsulation of content stream
- 3D characters reconstruction with Time Varying Meshes or Point Clouds
- Data orchestration within the information flow

EXPECTED IMPACT

To set a new standard in social VR using off-the-shelf products