



Tampere University of Technology
<http://www.tut.fi/en>

www.full-parallax-imaging.eu
www.etn-fpi.eu

Mid Sweden University
<http://www.miun.se/en>

University of Valencia
<http://www.uv.es>

Newcastle University
<http://www.ncl.ac.uk>

Christian-Albrecht-University Kiel
<http://www.uni-kiel.de>

Fraunhofer IIS
<http://www.iis.fraunhofer.de>

Holografika
<http://www.holografika.com>

Raytrix GmbH
<http://www.raytrix.de>

Yleisradio Oy
<http://yle.fi>

New Factory Ltd.
<http://newfactory.fi>

Nanyang Technological University
<http://www.ntu.edu.sg>

RealEyes GmbH
<http://real-eyes.eu/en>

Centre for Genomic Regulation
<http://www.crg.eu>

Huawei Technologies Duesseldorf GmbH
<http://www.huawei.com/de>

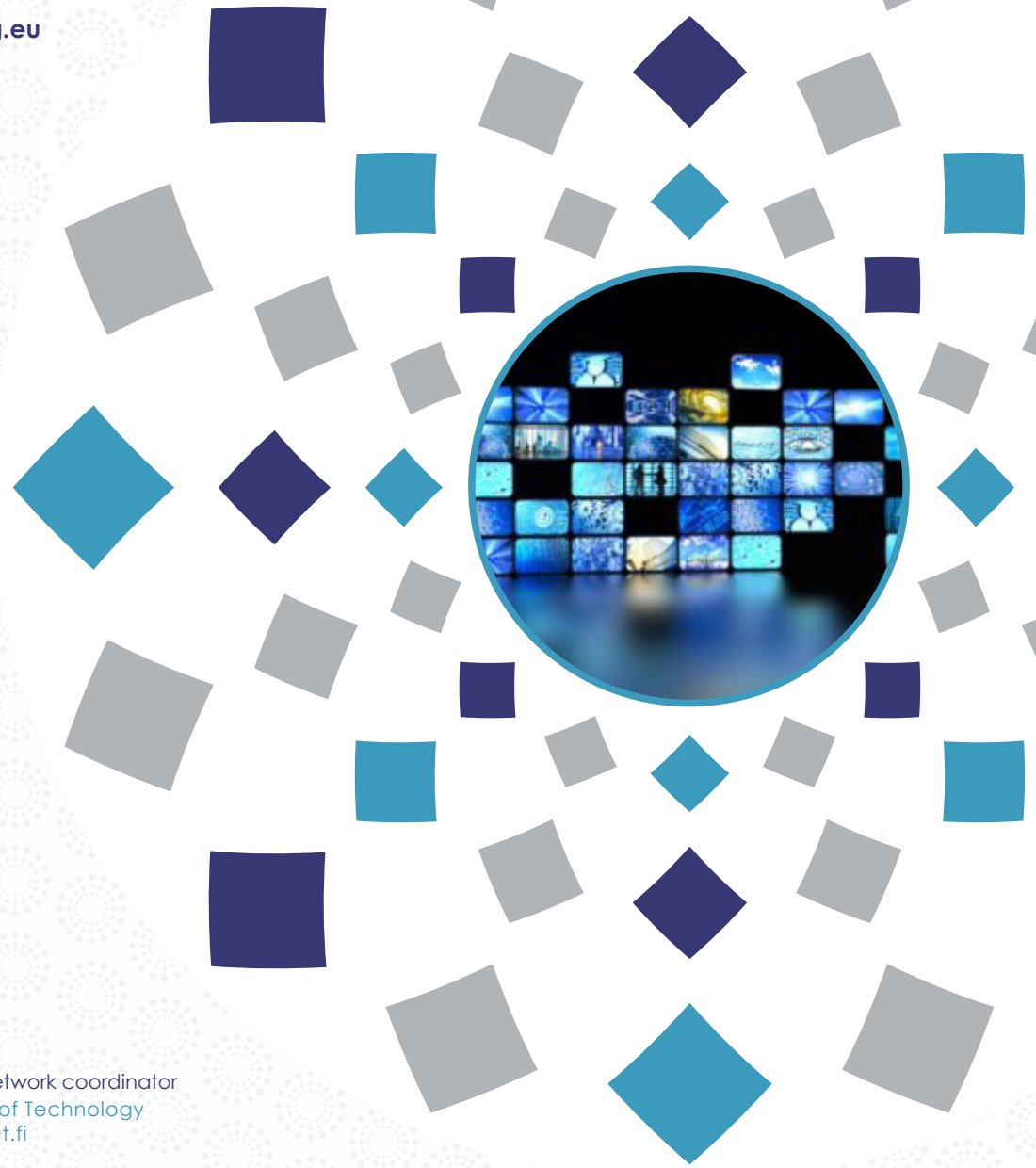
Exact Innovation
<http://www.exactinnovation.com>

Pázmány Péter Catholic University
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network

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 **european training network**
 on full parallax imaging



Current displays fall far short of truly recreating visual reality. This can never be achieved by painting an image on a flat surface such as a TV screen, but requires a full-parallax display which can recreate the complete lightfield, i.e. the light traveling in every direction through every point in space. Recent years have seen major developments towards this goal, promising a new generation of ultra-realistic displays with applications in medicine, informatics, manufacturing, entertainment, gaming and more. However, achieving this will require a new generation of researchers trained both in the relevant physics, and in the biology of human vision. The European Training Network on Full-Parallax Imaging (ETN-FPI) aims at developing this new generation.

ETN-FPI is a four year (2015-2019) H2020 Marie Skłodowska-Curie Innovative Training Network that brings together 8 beneficiaries and 8 partner organizations from Finland, Sweden, Germany, United Kingdom, Spain, Hungary and Singapore, with the aim of training a new generation of researchers in the area of full parallax imaging. This will be achieved by hiring talented 15 early stage researchers (ESR) and training them to become future research leaders in this area.

The research programme aims at harmonizing and advancing the research in the areas of plenoptics, light field and integral imaging under the FPI umbrella. The research work is organized in three work packages (WPs):

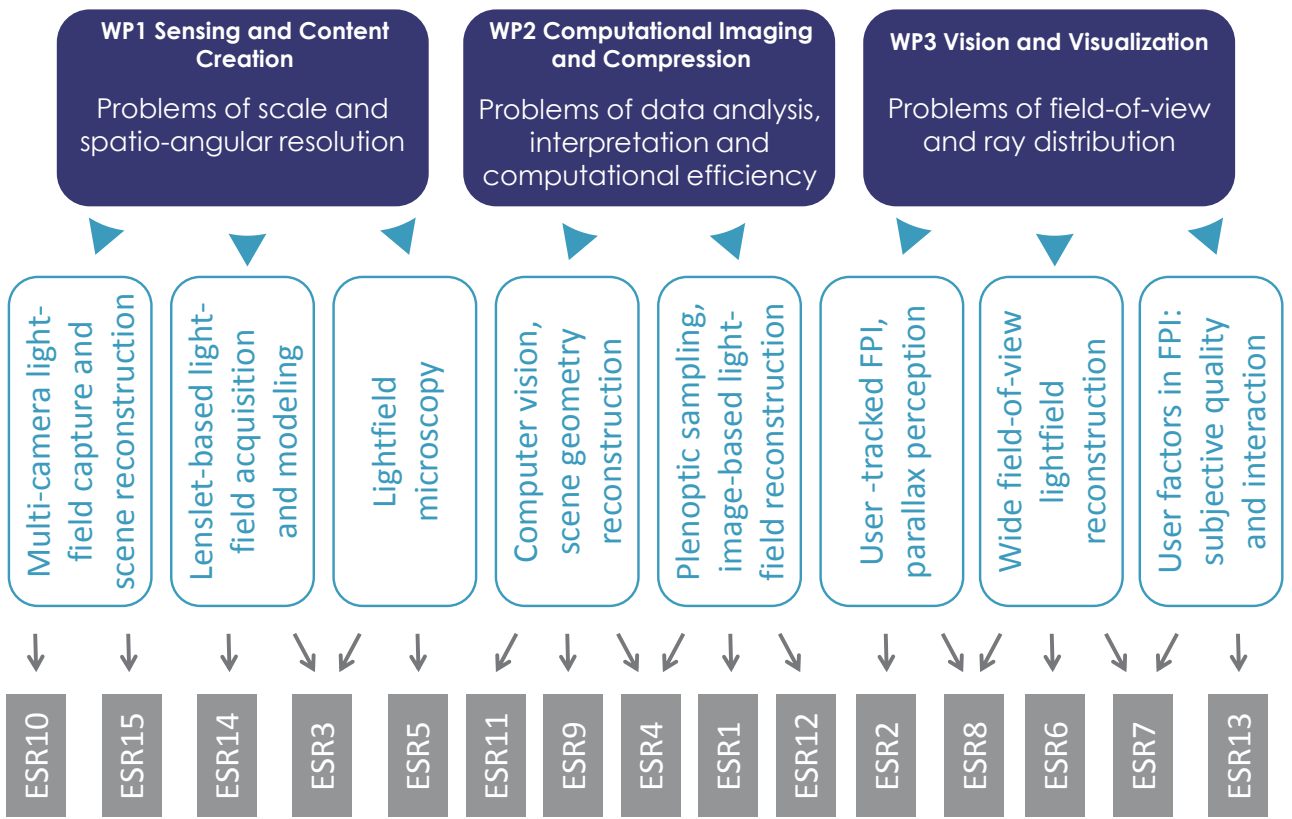
- WP1: Sensing and content creation, focusing on problems of optimal spatial-angular resolution for lightfield sensing
- WP2: Computational imaging and compression, focusing on problems of analysis, interpretation, and compression of lightfield data
- WP3: Vision and Visualization, focusing on problems of full parallax visualization of 3D data

The training programme consists of online seminars, training schools, workshops and a conference. It encompasses the disciplines of theoretical and applied optics, multidimensional image processing, visual neuroscience, and management of innovations and aims at supporting the ESRs for gathering competitive skills and becoming highly competent in bringing innovations to the field of ultra-realistic and interactive visual media.

The programme will advance the knowledge in the area of 3D scene sensing, lightfield analysis and interpretation, and visualization of full parallax 3D content

The network combines five underlying fundamental areas for training and research:

- visual neuroscience
- optics
- visual computing
- signal and data processing
- management of innovation



description

research



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