Yu.N. Ovechkis, Moscow Polytechnic University *ovechkis@yandex.ru*

PlenopticSystems and Holography 3

***Abstract***

***The report describes the basics of the plenoptic method of recording information about the spatial characteristics of the displayed objects by video, film or photography. Like holography, information is recorded in coded form on a photo-recording material, but in digital form, and the corresponding software allows to determine the spatial coordinates of each points of objects and reconstruct their virtual model. Thus, the light field recorded with memorization of the light rays directions. In this case, unlike the holographic interference method of wave field registration, the recording and the encoding is made in the usual white light. Examples of possible application in image holography are given, particularly in holographic cinema.***

***Keywords: Integral photography, Plenoptic camera, Holography, Autostereoscopy, Stereoscopy, Holographic Cinema.***

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