Video transmission in broadband optical-wireless links

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Abstract

Next generation converged wireline/wireless broadband access networks are moving toward higher bandwidth demanding broad range of video applications such as high-definition TV (HDTV) and multi-view-video. Different radio-over-fiber (RoF) approaches for video transmission will be numerically investigated and experimentally demonstrated for access networks applications. Performance-dependency of video-coding schemes to both fiber transmission impairments such as chromatic dispersion (CD) and blockage of the signal for wireless transmission will be studied based on different video-quality assessment techniques.

Plans on work in the project concerning video transmission over optical-wireless links are going to be presented. A presentation will include the technical analysis of the state of the art in the area including both the analysis of the physical layer and an examination of uncompressed and compressed video transmission from the perspective of an application layer. Reasons and incentives for the research are also going to be presented. Authors would like to present their achievements in the following FRUCT conferences.

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