# AN EFFICIENT VIDEO RENDERING SYSTEM FOR REAL–TIME ADAPTIVE PLAYOUT BASED ON PHYSICAL MOTION FIELD ESTIMATION  (WedAmPO4)

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**Abstract :**

In this paper we present a software implementation of an Adaptive Playout System for video rendering. In our opinion the system can be useful for the rendering of multimedia material that is delivered (in single or multi–cast way) to the final user(s) over a "best effort" network that is not able to guarantee a constant delay in delivering the data packets. The proposed solution is an alternative to the "traditional" pre–buffering at the decoder side, that ensures to absorb the variation of delivery delay, but imposes, to the final user, to wait a lot when the rendering starts and also it can generate annoying freezing of the video in case of pre–buffer underflow. Moreover the system can be very effective when the user switches frequently (makes "zapping") among several channels distributed through the network. Actually the system run in real time on a normal PC for the Adaptive Playout rendering of CIF sequences. A series of informal subjective tests has demonstrated that the system has good potentialities.

**Menu**