



VIDEO CODING USING NON-MANIFOLD MESH (WedPmOR10)

★ Author(s) :

Nathalie Cammas
Stéphane Pateux
Luce Morin

(France Telecom R&D, France)
(France Télécom R&D, France)
(IRISA-INRIA, France)

★ Abstract :

In this paper, we present a novel mesh structure for representing the motion in the occlusion areas for video analysis and video coding purposes. We use the notion of crackline which represents a rupture in a motion field and create a non-manifold mesh that allows to estimate the motion in the occlusion areas without degeneration of the triangles. The non-manifold mesh can represent the discontinuities in the motion introduced by moving objects and it improves the motion estimation in the occlusion areas. Results show the better prediction of the texture in those areas, thus improving the coding efficiency.