Alessandro Rizzi (Università degli Studi di Milano), *A perceptual approach to digital color restoration*
This talk presents a method for colour digital restoration based on a perceptual approach, using a computational model of the human vision system. The basic idea of the proposed approach is that the restoration of the film colour fading and of possible colour dominants can be seen as a problem of dynamic range maximization and chromatic noise removal; it follows the idea of applying normalization mechanisms of our visual system like colour and lightness constancy. The proposed method is unsupervised and requires a minimal user control. This property makes it suitable for the restoration of movies, a kind of work that requires a high level of professional user control (and consequently cost). Moreover, the perceptual approach can be an interesting criterion of choice in all these common cases for which an original version for comparing the result of the restoration is missing.