# Adjustment of an Iterative Algorithm Based on the Distribution of Image Derivatives for Atmospheric Deblurring

Image restoration is significant for a variety of applications and has extensive practice in the field of image processing. The Bind-deconvolution sub-topic deals with image restoration when the image spreading features is unknown, beyond the information that can be extracted from the image itself.

This research focuses on an iterative image restoration method, based on image gradient distribution. Recent researches have shown high capabilities of this method to restore an image blurred as a result of camera shakes. This research examined the capabilities of this method to restore images when blurred as a consequence of other factors, focusing on blur caused by passing through a long-distance atmospheric medium. The research includes theoretical analysis, simulations and tests on real images.