1145-VF-2171 **Mohamed Allali*** (allali@chapman.edu). *Adaptive Thresholding and Binarization.*

Binarization is the classification of pixels in an image as either black or white to separate an image into background and object. Adaptive thresholding methods have been developed to automatically separate images into multiple regions beyond just background and object. In this talk I will show, using some mathematical and statistical methods and techniques, how binarization and adaptive thresholding of digital images can be incorporated into some mathematics courses. Images are the most effective medium of human communication and, when processed under the control of students and teachers, they put mathematical ideas in an exciting new light. (Received September 24, 2018)