Segmentation of speckle images based on level-crossing statistics

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(a) (b)

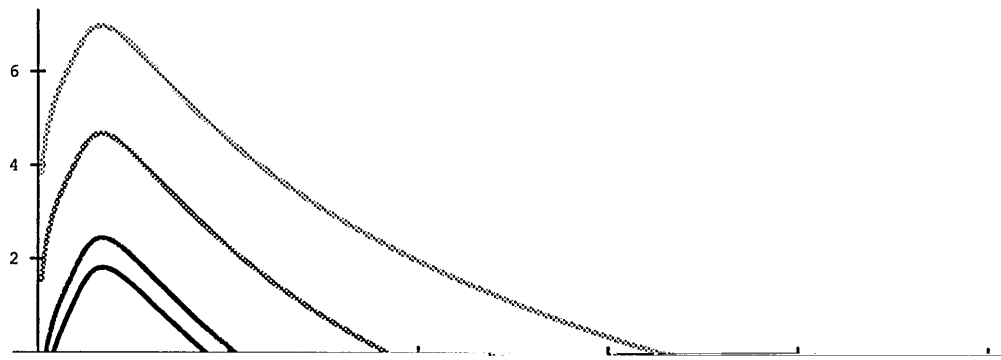
plex images having multiple regions and unknown parame-

$\xi(t)$ be a stationary process having spectral representation

$$\xi(t) = \int_{-\infty}^{\infty} \exp(jt\lambda)\mathrm{d}\zeta(\lambda). \tag{8}$$

in general quite complex, simple results are easily obtained for the limiting cases when $u \to 0$ and $u \to \infty$.[11,14]

Consider first the case of fades as $u \to \infty$ and the case of excursions when $u \to 0$. In both of these cases the stationary


6
4
2

The scalar multiplication of $\mathcal{A}$ by the scalar $\mathbf{c}$ is denoted as

$$\mathbf{c}\mathcal{A} = \{\mathbf{c} \cdot \mathbf{x} | \mathbf{x} \in \mathcal{A}\}. \tag{35}$$

The reflection of $\mathcal{A}$ is the special case

written to generate synthetic speckle images with known parameters and contents. These images were constructed by generating independent, zero-mean, white, unit-variance, complex circular Gaussian variates that multiply some

result in a negligibly biased ratio of the mean to the standard deviation. For similar regions Wear and Popp[16] and Tuthill

er, the seeds were changed between columns. In the case for which the means of the two regions are known, the algorithm

(b)) Tj 8 0 0 8 180 493.48 ((b)) 150: 8, 0 0 8 88 462.2 0m ((b)) Tj 8 0 0 8 159 471. Tm ((b)) 200: 8, 0 0 8 88 462.22 Tm ((b)) Tj 8 0 0 8 214 471.1 Tm7((b)) 250.

7.5 7.5

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