

**Sabri A. Mahmoud**, M. S. Afifi, and R.J.Green,  
"Recognition of Multiple Moving Objects in Images",  
Proceedings of the 18th annual Pittsburgh Conference on Modeling and Simulation, April 23-24,  
1987, pp.925-932.

**Key words:** Velocity computation, multiple moving objects, image sequence, Fourier Transform, Image sectioning, Recognition.

### **Recognition of Multiple Moving objects in Images**

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#### **ABSTRACT**

Analysis for the detection and velocity computations of multiple moving objects in sequences of image frames is presented. Previous published analysis addressed the transformation of the three dimensional variations of image sequences to two dimensional spectrum, in which one or two objects are moving in the sequence. In this paper a generalization is presented which handles the cases of multiple moving objects in an image sequence.

Simulation results are presented which demonstrate the applicability of this technique. Multiple moving objects appear in the spectrum domain as peaks which are used to compute the velocity of motion of the different moving objects.

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