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**Answers to “Beat Tracking by Dynamic Programming.”**

1. **How does beat tracking differ from onset detection?**

Onset detection finds the beginning threshold of a signal while beat detection focus on where the signal has the strongest timing component that would be perceived as tempo. As signals have various envelopes of attack, the onsets tell us when sound events begin while beat detection informs us when the sound events rhythmic quality happen over the coarse of the audio file. Onsets focus on singular events while beat detection looks at multiple events. Beat tracking scans and averages the onset envelope time of every onset to find the best average and location of the beat.

1. **What is onset strength? What is onset strength envelope?**

Onset strength is the area where the beat would be most defined.

1. **What is a global tempo estimate?**

Global tempo estimation gives us the target inter-beat interval or .