

ABSTRACT

The character of the music can be seen from the physical features contained in the music. This Final Project will do physioacoustic analysis which was seen from the human brain waves response that had been recorded on EEG (Electroencephalogram) when listening to Traditional West Java songs based on the characteristic of ZCR (Zero Crossing Rate). The instrumental song used were Ayun Ambing, Karatagan Pahlawan, and Jalan Satapak which is dominated by bamboo flutes. Physioacoustic analysis will be represented by the value of PSD (Power Spectral Density) from each respondent test based on TP9, AF7, AF8, and TP10 electrodes in Gamma frequency (>20Hz), Beta frequency (12 Hz – 20 Hz), Alpha frequency (8 Hz – 12 Hz), Theta frequency (4 Hz – 8 Hz) and Delta frequency (1 Hz – 4 Hz). The average of ZCR value for Ayun Ambing song is 0.0234, Karatagan Pahlawan song is 0.0359, and Jalan Satapak song is 0.0444. The result of physioacoustic analysis states that brain waves response from Gamma, Beta, Alpha, Theta and Delta have a significant difference between each electrodes. So in this Final Project research it can be concluded that when listening to traditional music from West Java, the human brain waves response are always showing different results for everyone.

Keyword : *Traditional Music, Physioacoustic, ZCR, EEG, PSD.*