# **SPECTRAL DENSITY BASED ON PHASE SHIFTING FOR MUSIC NOTATION**

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*Abstract*

Exploration traditional music is necessary to know the characters of this music. While the development of western music is very fast, eastern music, such as gamelan, in particular, still have the stigma as the art of classical music and get caught up in terms of preservation of traditional arts, which inhibit creativity to develop the eastern music. Therefore, the development of in-depth research of eastern music is needed to bring back the greatness of this music like the one in its era.We apply the Adaptive Cross Correlation (ACC) method. Experiments show that the proposed method is given 2-7% for a real gamelan performance improvement compared to conventional methods. With the beginning of research in the field of gamelan music, the development is expected to continue this kind of music like gamelan music ties with western music, the manufacture of electronic gamelan, which can be easily taken and making it easier for young people to learn it.

***Key words:*** *Extraction of Musical Instrument, Saron Spectral Density Model, The Pitch Shifting, Cross Correlation.*