Using the Implication/Realization Model for Measuring Melodic Similarity

The concept of melodic similarity has become increasingly relevant in the light of music retrieval and music content processing systems. We propose a new way of measuring melodic similarity, based on analyses of the melody according to the Implication/Realization (I/R) model for melodic structure and cognition. The similarity is assessed as the edit-distance between these I/R analyses. We present some experiments and results, comparing this approach to edit-distance based measures on other melodic representations. We argue that the I/R representation combines some advantages of the other measures, and is a good compromise between concrete and abstract levels of melody representation.