

Get rhythm -- why the key to finding music you like is rhythm, not genre

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So close and yet so wrong - you might love heavy metal like Metallica but your music platform suggests you should also like the Sixties sound of The Doors, simply because both bands are classified as rock.

New research published today, Thursday, 20 May, in [New Journal of Physics](#), shows that searching for the temporal aspects of songs - their [rhythm](#) - might be better to find music you like than using current automatic genre classifications.

By studying similar and different characteristics of specific rhythmic durations and the occurrence of rhythmic sequences, the group of Brazilian researchers has found that it is possible to correctly identify the musical genres of specific musical pieces.

The researchers studied four musical genres - rock, blues, bossa nova and reggae - looking at 100 songs from each category, analysing the most representative sequences of each genre-specific rhythm such as the 12 bar theme in blues, which means that the song is divided into 12 bars - or measures - with a given chord sequence.

Using hierarchical clustering, a visual representation of rhythmic frequencies, the researchers were able to discriminate between songs and come up with a possibly novel way of defining musical genres.

As the researchers write, "By showing that rhythm represents a surprisingly distinctive signature of some of the main musical genres, the

work suggests that rhythm-based features could be more comprehensively incorporated as resources for searching in music platforms.

Musical genre classification is a nontrivial task even for musician experts, since often a song can be assigned to more than one single genre. With our proposed method, new sub-genres (for example, rock-blues) can arise from original ones. Therefore, we observed a significant improvement in the supervised classification performance."

The next step, as suggested by the researchers, would be to include further aspects such as the intensity of the beat in future research, which could increase accurate genre identification even more.

More information: Paper: iopscience.iop.org/1367-2630/12/5/053030

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