# MIREX ONSET DETECTION TASK

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## ABSTRACT

This extended abstract describes the MIREX submission `LogFiltSpecFluxOffline` and it's online variant `LogFiltSpecFluxOnline` for the onset detection task.

## 1. INTRODUCTION

For the technical details of the systems, please see [2]. A BSD-style licensed Python implementation can be found at `https://github.com/CPJKU/onset_detection`.

## 2. RESULTS

The `LogFiltSpecFlux` method is able to outperform all other onset detections algorithms besides the current state-of-the-art `OnsetDetector`. This holds true for both online and offline settings.

| Algorithm | F-measure | Precision | Recall |
|---|---|---|---|
| LogFiltSpecFlux [2]. | **0.8224** | 0.8172 | 0.8572 |
| LogFiltSpecFlux [2]. * | **0.8180** | 0.8167 | 0.8477 |
| OnsetDetector.2012 [3] | 0.8538 | 0.8518 | 0.8835 |
| OnsetDetectorLL [1] * | 0.8309 | 0.8450 | 0.8484 |
| Röbel (2011) | 0.8065 | 0.7831 | 0.8788 |
| Zhou (2007) | 0.8080 | 0.8570 | 0.7820 |

**Table 1**. MIREX onset detection results. Asterisks mark online results. Years other than 2012 are indicated accordingly.

## 3. REFERENCES

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[2] S. Böck, F. Krebs, and M. Schedl. Evaluating the online capabilities of onset detection methods. In *Proceedings of the 13th International Society for Music Information Retrieval Conference (ISMIR 2012)*, Porto, Portugal, October 2012.

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