Description
Estimation of periodicities in audio signals
Global tempo (BPM), Time-variable tempo, meter
Time positions : beats and downbeats

Use-cases
Pre-processing for higher-level automatic music analysis features
Tempo and meter : among major perceptual characteristics of a music recording
-> automatic track labeling (classification), search by similarity, recommendation, playlist generation, music summary generation
-> Music portals, management of offline and mobile user track collections

Music production : content-based audio editing and processing
Beat- and meter- synchronous segmentation/ cueing/ montage (music production, studio and live)
Beat-synchronous variable tempo interpolation between 2 tracks (Djing software)

Application areas
Online music providers and music portals. Software publishers : music players, music collection management, studio and live music production

Conditions for access and use
IRCAM License

Technical requirements
IrcamBeat is available as a static library for Linux, Mac OS X and iOS platforms.
Ircambeat – Audiosculpt demo

Estimation automatique de la métrique 3/4

Coldplay “Sparks”
AudioPrint

Description
Live or offline recognition of musical tracks, within a database of learnt tracks
Precise estimation of temporal offset within track
Based on a compact and robust signature (fingerprint)

Use-cases
Track database owners/management: consistency management, identification of unknown or user-generated contents: metadata completion, digital right management
End users: Shazam-like, plus time synchro (lyrics, etc.); second screen synchronization

Application areas
Second screen software providers, Digital right management, Music query software developers

Conditions for access and use:
IRCAM License

Technical requirements:
AudioPrint is available as a static library for Linux, Mac OS X and iOS platforms.
AudioPrint - demo

Title
Cover image
Time code
Lyrics