**From Source (#14 in main document):**

* Frequency Bin:The frequency range and resolution on the frequency axis of a spectrum graph depends on the sampling rate and the size of the data record (the number of sample points).
* Steady State: unvarying condition in a physical process.
* Transient : when a process variable or variables have been changed and the system has not yet reached a steady state.
* (TSS-Separation)Transient-Steady-State-Separation: techniques require a separate processing on two constitutive components of the signals : its “transients” and its “steady-state”.
* Phase Increment: Oscillators store one period of an output waveform in an internal table and produce their output signal by reading values from successive locations in the table. When the last value in the table has been read the oscillator "wraps around" to the beginning of the table again, producing periodicity. The distance between the current table location and the next table location is called the phase increment, or sampling increment.
* Phase Vocoder :type of vocoder(a synthesizer) which can scale both the frequency and time domains of audio signals by using phase information.
* Instantaneous Frequency:In contrast to a Fourier frequency, the instantaneous frequency is generally a time-dependent frequency. The instantaneous frequency of a sinusoidal signal is constant and equals the oscillation frequency
* Short Time Fourier Transform(STFT):is a [Fourier-related transform](https://en.wikipedia.org/wiki/List_of_Fourier-related_transforms) used to determine the sinusoidal frequency and phase content of local sections of a signal as it changes over time.[[1]](https://en.wikipedia.org/wiki/Short-time_Fourier_transform#cite_note-1) In practice, the procedure for computing STFTs is to divide a longer time signal into shorter segments of equal length and then compute the Fourier transform separately on each shorter segment.
* Windowed Signal:a window function is a [mathematical function](https://en.wikipedia.org/wiki/Function_(mathematics)) that is zero-valued outside of some chosen [interval](https://en.wikipedia.org/wiki/Interval_(mathematics)). When another function or waveform/data-sequence is multiplied by a window function, the product is also zero-valued outside the interval: all that is left is the part where they overlap.
* Hop size: how much we can advance the analysis time origin from frame to frame.
* Unwrapped spectral Bin Phase:When spectral phase is processed, it is often necessary to unwrap the phase to make it a ``continuous'' function.It is based on the assumption that phase jumps by more than pi radians must have been ``wrapped''. That is, multiples of 2\*pi are added or subtracted so that the phase changes by no more than (+,-) PI from one spectral bin to the next.
* Time Resolution: The resolution in the time domain depends on the sampling rate of the D/A converter in the analyzer - the higher the sampling rate, the greater the resolution.
* Frequency Resolution:The frequency resolution is dependent on the relationship between the FFT length and the sampling rate of the input signal.
* Constant-Q Filter Bank:the bandwidth of each filter-bank channel is proportional to [center frequency](http://en.wikipedia.org/wiki/Bandpass),If the output [signals](http://ccrma.stanford.edu/~jos/filters/Definition_Signal.html) from all channels of a constant-Q filter bank are all sampled at a particular time, we obtain what may be called a constant-Q transform . A constant-Q transform can be efficiently implemented by smoothing the output of a [Fast Fourier Transform](https://ccrma.stanford.edu/~jos/mdft/Fast_Fourier_Transform_FFT.html) ([FFT](https://ccrma.stanford.edu/~jos/mdft/Fast_Fourier_Transform_FFT.html))
* Perfect Reconstruction Filter: A perfect reconstruction filter bank decomposes a signal by filtering and subsampling.It reconstructs it by inserting zeroes, filtering and summation.
* Note Onset: Where in the time domain a note starts.
* High Frequency Content onset detection: Using the energy contained in short window length signals to detect note onset because of the rise in high frequency energy between the two frames and the normalised high frequency content for the current frame.
* Maximum Gradient: The directional derivative in the direction of greatest change.
* MultiResolution Analysis:design method of most of the practically relevant [discrete wavelet transforms](https://en.wikipedia.org/wiki/Discrete_wavelet_transform) (DWT) and the justification for the [algorithm](https://en.wikipedia.org/wiki/Algorithm) of the [fast wavelet transform](https://en.wikipedia.org/wiki/Fast_wavelet_transform) (FWT)

End of Source 14