Gear: Stereo sound system, big screen computer projector. Time: 1 - 2 hours (or shorter while cutting down on content).

## **Basic concepts in Live Looping**

Commands: Record, Overdub, Multiply, Substitute, Reverse, HalfSpeed, Varispeed.

Modes and concepts: Quantization, Rounding, Switch Quantization, Cycle, Subcycle, Loop, 8ths Per Cycle.

## **Advanced techniques**

--> Theory: Multi Lateral Improvisation, Instant Composition. Knowing harmony and music theory is critical.

--> Specific techniques: Linear loops. Parallel loops, poly rhythm. Creating chord changes using varispeed/rate. Using scripted command sequences.

## Sound Design for Live Looping

--> Remix inspired concept:

Different musical elements are distributed into many parallel loops. Summing of loops is handled by multiple parallel mixer channels. Each mixer channel is tweaked to fit into the general mix. Musical dynamics and variation can be created by mixing the channels with the recorded loops.

--> Musician inspired concept: ("mixing reverse engineered")

Different musical elements are summed as layers of the same loop. The musician plays his instrument through effects that will also be recorded as the input to the loops created. Therefore musical dynamics and variations has to be created by the musician as he is playing each part in the first place. Play the sounds at the level and timbre they will need to fit into the mix! Play with frequencies already cut in order to not masque out other musical parts when layered together in the loops to be summed.

Laptop demonstration of the above mentioned techniques will use the following software: **Plogue Bidule** - modular environment for sound design by audio processing and signal patching. **Mobius** - EDP inspired freeware Live Looping Sampler for Windows and Mac. Diverse AU, VST and Logic native plug-ins. **EDPx** (enhanced software version of the legendary EDP rack mounted looping device)

MainStage (performance host environment for Apple Logic's plug-ins and virtual instruments)