## Robert Wolf HERCs

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## Workshop -HERCs: Introduction to Algorithmic Synthesis

## Overview

HERCs is a music synthesizer that can be programmed in a computer language called PROLOG. Currently it exists as software emulation (available for Windows platforms). However, it is expected that HERCs will become a full-scale hardware instrument.

PROLOG means PRO-gramming in LOG-ic. Essentially, it is much closer to human reasoning than any other mainstream computer language. Therefore it seems to be best suited as a scripting language of choice for an electronic instrument (synthesizer) for tasks such as: automatic composition, algorithmic music and synthesis, storing and reasoning upon certain rules of composition, etc.

Putting aside the PROLOG interpreter, HERCs is in its core a music synthesizer based on algorithmic architecture. Therefore it allows for seamless mixing of various forms of synthesis (i.e. subtractive, additive, FM, wavetable, Vector morphing, ROM-player, etc.).

During the workshop the participants will be introduced to PROLOG programming language and will perform several simple tasks. This will involve generating random notes, random chords and melodies. After the workshop each participant will have the knowledge of HERCs environment and PROLOG language at the introductory level.

## **Biography**

Robert Wolf, polish musician (cello), music composer/arranger and computer programmer. He was born in Gdansk where he received his Master's degree in cello playing from Music Academy in 1993. Soon after, he joined the State Symphony Orchestra of Zielona Gora, where he assumed duty of principal cellist and section leader. Since 1998 he lives in Adelaide, where he studied music composition under Matthew Atherton and music technology under Christian Haines.



