ESCHER

a Matlab-based app for generating visual stimuli

and

HERMES

an Arduino-based platform to synchronize visual stimuli and recordings

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1. **Introduction and setup overview**

Escher + Hermes is a comprehensive tool to deliver visual stimuli during experimental recordings. Its purposes include:

* Generation of visual stimuli of different kinds:
  + Flashes.
  + Alternating checkerboards.
  + Moving grids or dots.
* Synchronization of visual stimulation with electrophysiology and/or imaging.
* Acquisition of movies with a widefield camera (PCO Edge4.2).

Visual stimuli are generated with a Matlab App called Escher

1. **Interaction with Hermes**
2. **Control of widefield camera (PCO Edge4.2)**
3. **Master-Slave mode with UDP connection**
4. **Visual stimulation**
   1. **Stimulation pipeline**
   2. **Stand-alone vs Master-Slave mode**
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