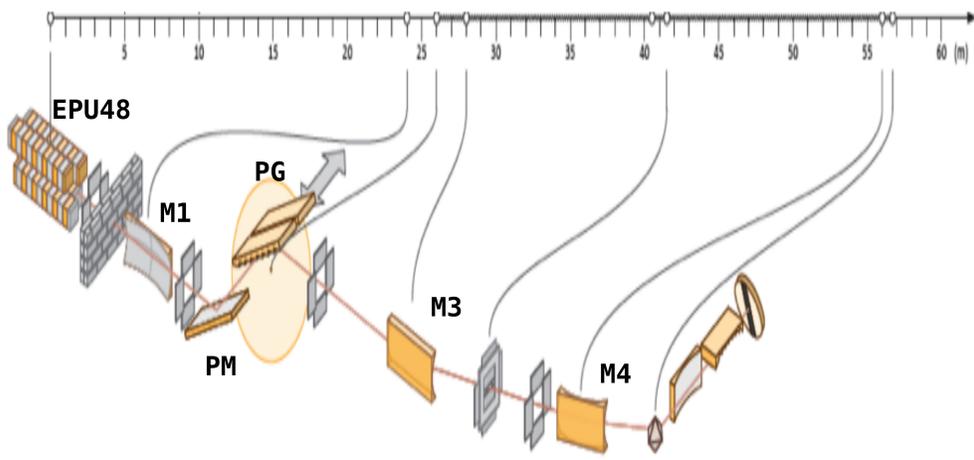


# Preliminary Scanning Integration at MAX IV



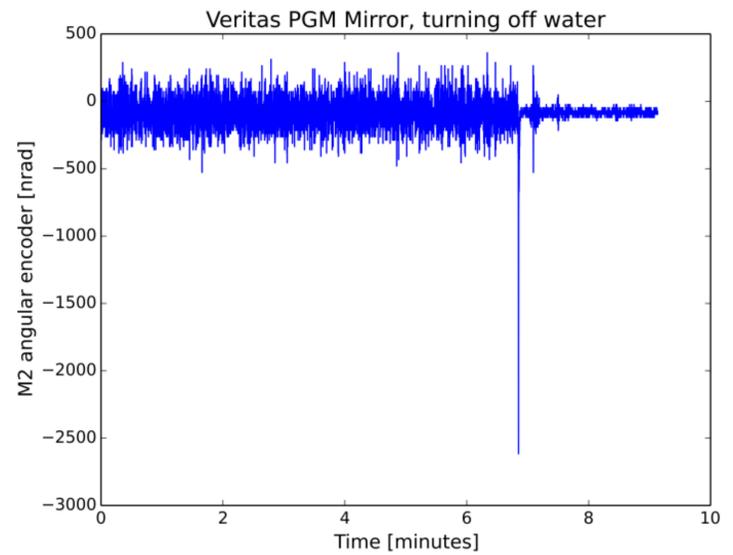
LABORATORY

J.J.Jamroz, P.J.Bell, J.Lidon-Simon, P.Sjoblom, D.P.Spruce, Lund, Sweden

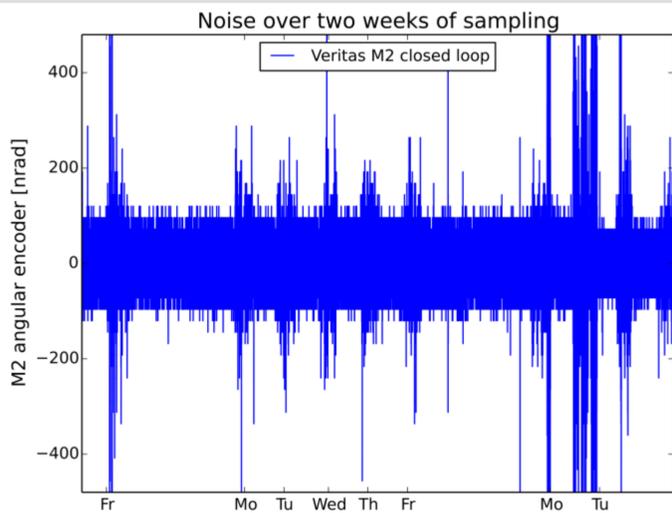


Optical layout of the VERITAS beamline.

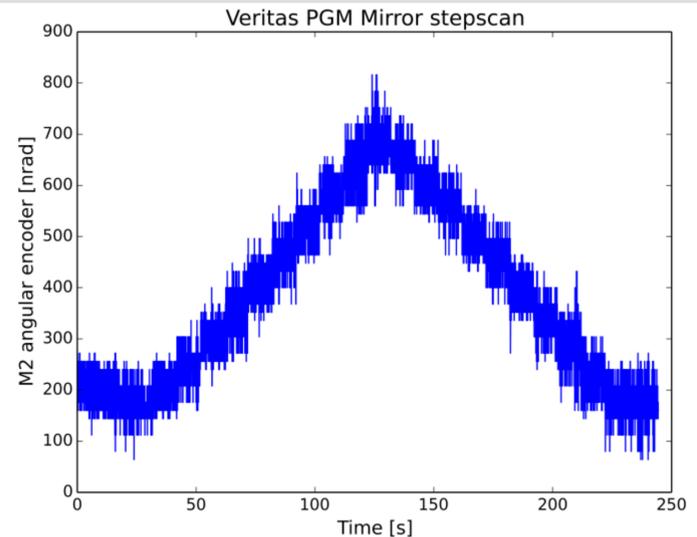
The beam height at the center of the undulator is 1300 mm, PGM has a 20 mm offset resulting in 1320 mm height at experiment



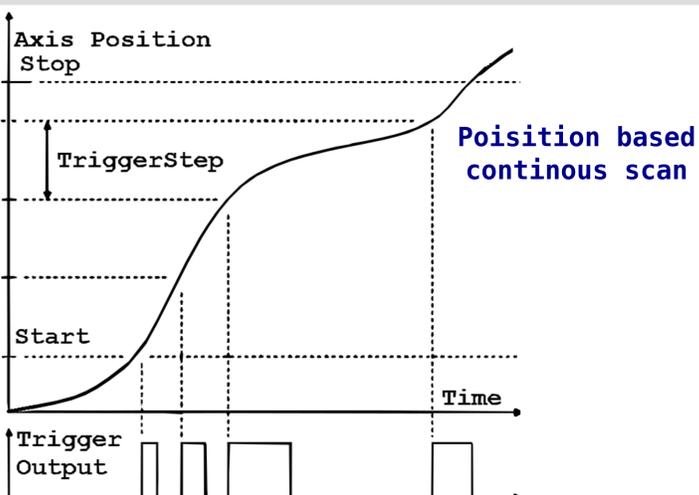
Noise in PM mirror is reduced by a factor of five when the two valves controlling a water flow are closed



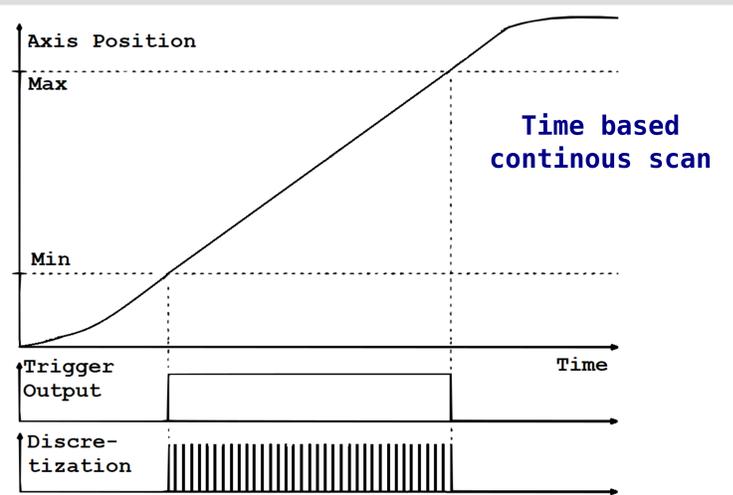
PGM optics controlled by stepper motors operating in closed loop have the ability to hold a steady position for long measurements



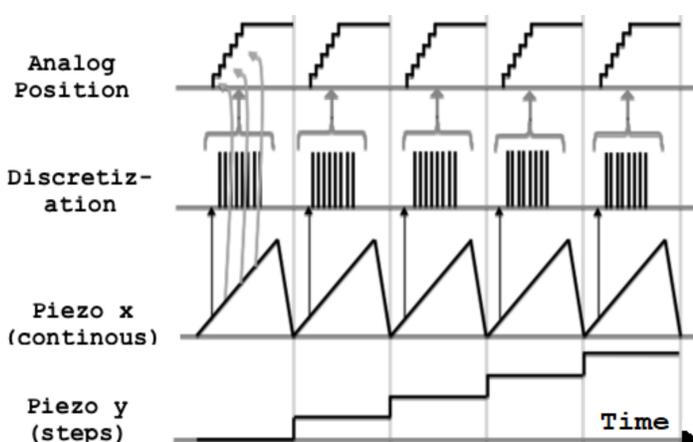
Veritas PM mirror inside PGM during a step scan of 10 up and down steps, with 10 seconds of sampling time in open loop



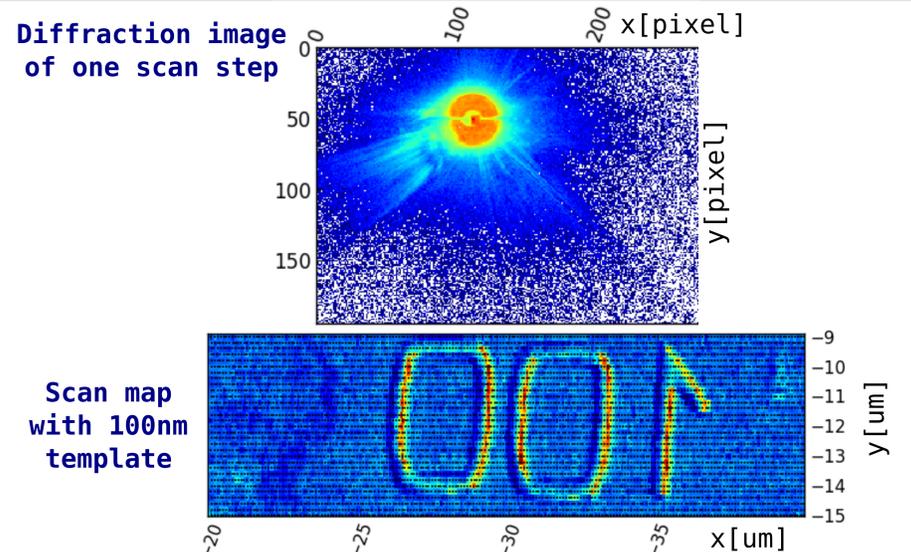
A predefined table:  $trigger=f(position)$  defines a synchronization trigger occurrence for a scan acquisition group



Predefined trajectory ( $position=f(time), V[m/s]=const$ ) generate the min-max gate signal which is fed to a beamline timing



Time-based scan structure at Nanomax



Initial results at Nanomax acquired by a Dectris Pilatus 100K detector