

## Galactic Center

### Observation plan

The PV observation will aim to three positions with 100 ks exposure for each pointing.

- the Galactic center (Sagittarius A\*; GC-1)
- the ~6' eastern side (GC-2)
- the ~6' western side (GC-3)

No roll angle constraint is requested. The last one is priority C. Resolve will work with no filter.

Xtend operating mode is full window with normal clocking.

### Immediate objectives

- [1] Measure the properties of the GC plasmas (electron/ion/ionization temperatures, metal abundances)
- [2] Measure the dynamics of the GC plasma and X-ray emitting cold gas
- [3] Probe the photoionization and scattered X-rays from Sgr A\* (X-ray reflection nebulae)
- [4] Probe the KaL1 and KaL2 lines associated with the Fe K $\alpha$  lines produced by low energy cosmic-ray protons
- [5] Clarify the origin of the recombination plasma of Sgr A East by plasma diagnostics
- [6] Monitor Sgr A\* flares