

## SN 1987A

### Observation plan

We will perform a single observation with an exposure time of 100 ks. Resolve and Xtend will be operated with an open filter and normal full window mode, respectively.

### Immediate objectives

- [1] Spectroscopically characterize the ejecta component to constrain the progenitor and the explosion mechanism
- [2] Spectroscopically characterize the CSM components to constrain the early phase evolution of the remnant and the progenitor's stellar wind structure
- [3] Measure line broadenings to study collisionless shock heating
- [4] Search for pulsation from the putative NS