

NIRSpec Observing Modes

The JWST Near Infrared Spectrograph (NIRSpec) has four observing modes for near-infrared multi-object spectroscopy (MOS), integral field unit (IFU) spectroscopy, fixed slit (FS) spectroscopy, and bright object time-series (BOTS) spectroscopy, from 0.6–5.3 μm .

Overview of NIRSpec observing modes

NIRSpec has four observing modes that correspond to [templates](#) in the [Astronomer's Proposal Tool \(APT\)](#):

- [Multi-object spectroscopy \(MOS\)](#) obtains simultaneous spectroscopy of multiple science targets within a $3.6' \times 3.4'$ field of view using the micro-shutter assembly (MSA).
- [Integral Field Unit \(IFU\) spectroscopy](#) uses the integral field unit to provide spatially resolved spectroscopy over a $3'' \times 3''$ square region.
- [Fixed Slits \(FS\) spectroscopy](#) provides five fixed slits for obtaining high sensitivity single object spectroscopy.
- [Bright Object Time-Series \(BOTS\) spectroscopy](#) uses a $1.6'' \times 1.6''$ fixed slit aperture for observations of bright sources that require stable, high throughput time-resolved spectroscopy.