



# 1218 - NIRSpec-IFU Observations of two QSOs at $z=6$

Cycle: 1, Proposal Category: GTO

## INVESTIGATORS

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## OBSERVATIONS

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
Observation Folder				
	1	NIRSpec IFU observation of J1148	NIRSpec IFU Spectroscopy	(1) J1148+5251
	2	NIRSpec IFU observation of J0100	NIRSpec IFU Spectroscopy	(2) J0100+2802

## ABSTRACT

This proposal is associated with NIRSpec Observation IDs:

FERRUIT\_3051

FERRUIT\_3052

The goal of the observations is to map (redshifted) optical nebular lines in the host galaxy and circumgalactic region of two luminous quasars at  $z \sim 6$ . The observations (obtained with the high resolution grating) will also be used to detect and characterize the quasar-driven outflows.

## **OBSERVING DESCRIPTION**

This proposal is associated with NIRSpec Observation IDs:

FERRUIT\_3051

FERRUIT\_3052

These are gathered under the proposal title

"NIRSpec and MIRI spectroscopy of QSOs - part #1"

Contact: Roberto Maiolino (r.maiolino@mrao.cam.ac.uk)

The NIRSpec IFU observations are done with the G395H grating and are aimed aimed primarily at mapping the strongest optical nebular lines (Hbeta, [OIII], Halpha, [NII]) in order to trace the distribution and kinematics of the medium in the host galaxy and the circumgalactic region.

We are not using TA as Gaia GS are available for any orientation, hence ensuring a pointing accuracy adequate for our goals.

We use NRSIRS2RAPID in order to better identify and remove cosmic rays.

# Proposal 1218 - Observation 1 - NIRSpec-IFU Observations of two QSOs at z=6

Observation	Proposal 1218, Observation 1: NIRSpec IFU observation of J1148											Tue Feb 20 23:18:31 GMT 2018
	Diagnostic Status: Warning											
Diagnostics	Observing Template: NIRSpec IFU Spectroscopy											
	(Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous		
	(1)	J1148+5251	RA: 11 48 16.6450 (177.0693542d) Dec: +52 51 50.21 (52.86395d) Equinox: J2000									
Template	Comments: Category=Galaxy Description=[High-redshift galaxies, Quasars] Extended=YES											
	TA Method NONE											
Dithers	#	Dither Type		Size		Starting Point		Number of Points		Points		
	1	CYCLING		MEDIUM		1		4				
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	G395H/F290LP	NRSIRS2RAPID	185	1	false	true	NONE	4	4	10854.134	

# Proposal 1218 - Observation 2 - NIRSpec-IFU Observations of two QSOs at z=6

Observation	Proposal 1218, Observation 2: NIRSpec IFU observation of J0100											Tue Feb 20 23:18:31 GMT 2018
	Diagnostic Status: Warning Observing Template: NIRSpec IFU Spectroscopy											
Diagnostics	(Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates				Targ. Coord. Corrections			Miscellaneous		
	(2)	J0100+2802	RA: 01 00 13.0200 (15.0542500d) Dec: +28 02 55.80 (28.04883d) Equinox: J2000							Comments: Category=Galaxy Description=[High-redshift galaxies, Quasars] Extended=YES		
Template	TA Method NONE											
Dithers	#	Dither Type		Size		Starting Point		Number of Points		Points		
	1	CYCLING		MEDIUM		1		4				
Spectral Elements	#	Grating/Filter	Readout Pattern	Groups/Int	Integrations/Exp	Leakcal	Dither	Autocal	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	G395H/F290LP	NRSIRS2RAPID	185	1	false	true	NONE	4	4	10854.134	