## ALMA Observing Activity from 2019-12-23T17:59:00 to 2019-12-30T18:00:00
## QA0 pass executions

**2019-12-30**

| Start (UT) | End (UT) | Project Code | SchedBlock | Project Title | PI | Executive | Array | Band |
|---|---|---|---|---|---|---|---|---|
| 16:35:54 | 17:40:52 | 2019.1.01364.S | G350_a_06_TP | How to form massive star and cluster in subsonic-to-transonic molecular clouds? | Cui | EA | Total Power | 6 |
| 15:58:56 | 16:48:59 | 2019.1.00195.L | 100662_a_06_TM2 | ALMAGAL: ALMA Evolutionary study of High Mass Protocluster Formation in the Galaxy | Molinari | EA EU NA | 12-m | 6 |
| 15:42:23 | 17:12:57 | 2019.1.01556.S | SDC13_a_03_7M | On the universality of fibres in star forming filaments | Williams | EU | 7-m | 3 |
| 15:27:43 | 16:35:47 | 2019.1.01364.S | G350_a_06_TP | How to form massive star and cluster in subsonic-to-transonic molecular clouds? | Cui | EA | Total Power | 6 |
| 14:50:36 | 15:58:48 | 2019.1.00195.L | 804173_a_06_TM2 | ALMAGAL: ALMA Evolutionary study of High Mass Protocluster Formation in the Galaxy | Molinari | EA EU NA | 12-m | 6 |
| 14:21:38 | 15:27:36 | 2019.1.01364.S | G350_a_06_TP | How to form massive star and cluster in subsonic-to-transonic molecular clouds? | Cui | EA | Total Power | 6 |
| 14:13:09 | 15:42:16 | 2019.1.00312.S | Lupus3MM_a_06_7M | Hall effect enabling the formation of a large Keplerian disk around the protostar Lupus 3 MMS? | Yen | EA | 7-m | 6 |
| 12:45:43 | 13:42:08 | 2019.1.00195.L | 777339_a_06_TM2 | ALMAGAL: ALMA Evolutionary study of High Mass Protocluster Formation in the Galaxy | Molinari | EA EU NA | 12-m | 6 |
| 12:06:57 | 12:45:34 | 2019.1.00195.L | 743353_a_06_TM2 | ALMAGAL: ALMA Evolutionary study of High Mass Protocluster Formation in the Galaxy | Molinari | EA EU NA | 12-m | 6 |
| 12:02:09 | 13:35:42 | 2019.1.00312.S | Lupus3MM_a_06_7M | Hall effect enabling the formation of a large Keplerian disk around the protostar Lupus 3 MMS? | Yen | EA | 7-m | 6 |
| 11:19:46 | 12:02:02 | 2019.1.00363.S | PGC04612_a_06_7M | WISDOM: Constraining the scatter in the M-sigma relation at fixed velocity dispersion | Davis | EU | 7-m | 6 |
| 11:13:20 | 11:57:26 | 2019.1.01514.S | SMG_a_1_04_TM1 | Confirming large-scale structures of dusty galaxies around enormous Lyman-alpha nebulae and high-z quasars | Arrigoni Battaia | EU | 12-m | 4 |
| 10:05:05 | 11:04:53 | 2019.1.00466.S | PSO_J159_a_06_TM1 | Probing [CII] Emission Associated with the First Sample of Strongest OI Absorption Systems in the Reionization Epoch | Cai | NA | 12-m | 6 |
| 09:53:18 | 11:00:05 | 2019.2.00134.S | NGC_2997_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 09:42:27 | 11:12:34 | 2019.1.01251.S | Q1227+28_a_04_7M | SUPERCOLD-CGM: a high-z survey of molecular gas across the circum-galactic medium of Enormous Lya Nebulae | Emonts | NA | 7-m | 4 |
| 09:07:02 | 10:04:11 | 2019.1.00466.S | PSO_J159_a_06_TM1 | Probing [CII] Emission Associated with the First Sample of Strongest OI Absorption Systems in the Reionization Epoch | Cai | NA | 12-m | 6 |
| 08:45:35 | 09:52:27 | 2019.2.00134.S | NGC_2997_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 08:11:07 | 09:05:37 | 2019.1.01702.S | 1338_a_06_TM1 | The physics of the ISM with CO and neutral CI: the final piece | Valentino | EU | 12-m | 6 |
| 07:36:43 | 08:44:13 | 2019.2.00134.S | NGC_2997_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 06:34:37 | 08:02:26 | 2019.1.01016.T | GRBpol_c_04_7M | Radio Polarlimetry of GRB Afterglows | Urata | EA | 7-m | 4 |
| 06:28:29 | 07:36:06 | 2019.2.00134.S | NGC_2997_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 05:54:33 | 07:24:17 | 2019.1.01600.S | AS2COS00_a_03_TM1 | A complete census of spectroscopic redshift of 850 micron selected high-redshift HyLIRGs | Chen | EU | 12-m | 3 |
| 05:28:31 | 05:52:45 | 2019.1.01484.T | GRB_1912_c_03_TM1 | Gamma-ray Burst Physics with ALMA: Direct Implications for the Explosions and Progenitors | Laskar | EU | 12-m | 3 |
| 05:23:37 | 06:33:32 | 2019.2.00062.S | Mon_R2_a_04_7M | Unlocking the Potential of the Most Definitive Molecular Tracer of UV-Enhancement: l-C3H+ | Lipnicky | NA | 7-m | 4 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 05:07:06 | 06:27:22 | 2019.2.00062.S | Horsekne_a_04_TP | Unlocking the Potential of the Most Definitive Molecular Tracer of UV-Enhancement: l-C3H+ | Lipnicky | NA | Total Power | 4 |
| 04:55:29 | 05:26:28 | 2019.1.01663.S | SN2018lf_a_03_TM1 | Testing the Connection Between Fast Radio Bursts and Superluminous Supernovae with ALMA | Eftekhari | NA | 12-m | 3 |
| 03:53:53 | 05:06:16 | 2019.2.00097.S | 2MASS_J0_a_04_TP | Probing the physical and chemical structure of dense cores: toward understanding methanol formation | Harsono | EA | Total Power | 4 |
| 03:48:47 | 04:54:32 | 2019.1.01272.S | LB08_a_06_TM1 | Unveiling the nature of three pre- or proto- brown dwarf candidates in Barnard 30 | Ruiz | CL | 12-m | 6 |
| 03:24:23 | 03:48:41 | 2019.1.01681.S | WD0612+1_a_06_TM1 | An Efficient Test of Evolved Planetary System Modeling | Farihi | EU | 12-m | 6 |
| 03:10:46 | 04:43:34 | 2019.1.00722.S | 2MASX_J0_a_03_7M | Deep CO(J=1-0) mapping survey of 103 Eridanus supergroup galaxies with Morita array | Morokuma | EA | 7-m | 3 |
| 03:00:12 | 03:23:28 | 2019.1.01681.S | WD0438+1_a_06_TM1 | An Efficient Test of Evolved Planetary System Modeling | Farihi | EU | 12-m | 6 |
| 02:41:21 | 03:53:16 | 2019.2.00097.S | 2MASS_J0_a_04_TP | Probing the physical and chemical structure of dense cores: toward understanding methanol formation | Harsono | EA | Total Power | 4 |
| 02:36:42 | 02:59:15 | 2019.1.01677.S | SPT-S_04_a_06_TM2 | Probing spatially resolved winds in powerful starbursts at high redshift with Hydrogen Fluoride | Lehnert | EU | 12-m | 6 |
| 01:36:29 | 02:36:35 | 2019.1.00949.S | MJ0417-l_b_04_TM1 | A triple-image HST-dark but IRAC and ALMA-detected galaxy behind a lensing cluster | Kohno | EA | 12-m | 4 |
| 01:25:52 | 02:38:46 | 2019.2.00097.S | 2MASS_J0_a_04_TP | Probing the physical and chemical structure of dense cores: toward understanding methanol formation | Harsono | EA | Total Power | 4 |
| 01:23:55 | 02:57:03 | 2019.2.00167.S | L1448-C_a_04_7M | Grain growth in the youngest protostellar envelopes: the pristine properties of star and planet-forming material | Galametz | EU | 7-m | 4 |

### 2019-12-29

| Start (UT) | End (UT) | Project Code | SchedBlock | Project Title | PI | Executive | Array | Band |
|---|---|---|---|---|---|---|---|---|
| 21:57:25 | 23:17:01 | 2019.1.00673.S | RCS_J231_a_03_7M | The highest resolution imaging of the Sunyaev-Zel'dovich effect at z~1 | Kitayama | EA | 7-m | 3 |
| 20:47:07 | 21:51:10 | 2019.1.01729.S | UGC12915_a_03_TM1 | Shocks and Star Formation across the Taffy system | García-Rodríguez | EU | 12-m | 3 |
| 20:37:51 | 21:57:18 | 2019.1.00673.S | RCS_J231_a_03_7M | The highest resolution imaging of the Sunyaev-Zel'dovich effect at z~1 | Kitayama | EA | 7-m | 3 |
| 19:17:31 | 20:37:45 | 2019.1.00673.S | RCS_J231_a_03_7M | The highest resolution imaging of the Sunyaev-Zel'dovich effect at z~1 | Kitayama | EA | 7-m | 3 |
| 19:03:43 | 20:04:12 | 2019.1.01556.S | SDC13_a_03_TP | On the universality of fibres in star forming filaments | Williams | EU | Total Power | 3 |
| 18:27:13 | 19:17:24 | 2019.1.01326.S | Position_a_03_7M | Localized Feedback Processes in the Galactic CMZ | Candelaria | NA | 7-m | 3 |
| 17:47:49 | 19:03:35 | 2019.1.01556.S | SDC13_a_03_TP | On the universality of fibres in star forming filaments | Williams | EU | Total Power | 3 |

### 2019-12-28

| Start (UT) | End (UT) | Project Code | SchedBlock | Project Title | PI | Executive | Array | Band |
|---|---|---|---|---|---|---|---|---|
| 03:46:08 | 04:46:25 | 2019.2.00062.S | Horsekne_a_03_7M | Unlocking the Potential of the Most Definitive Molecular Tracer of UV-Enhancement: l-C3H+ | Lipnicky | NA | 7-m | 3 |
| 03:28:30 | 04:33:31 | 2019.1.00236.S | MJ0553-l_a_03_TM1 | Strongly Lensed HST-dark Object Discovered by ALMA Lensing Cluster Survey | Fujimoto | EA | 12-m | 3 |
| 03:24:35 | 04:39:32 | 2019.2.00134.S | NGC1365_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 02:16:05 | 03:45:52 | 2019.1.00722.S | 2MASX_J0_a_03_7M | Deep CO(J=1-0) mapping survey of 103 Eridanus supergroup galaxies with Morita array | Morokuma | EA | 7-m | 3 |
| 02:08:54 | 03:24:08 | 2019.2.00134.S | NGC1365_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 01:54:29 | 02:51:21 | 2019.1.00949.S | MJ0417-l_d_03_TM1 | A triple-image HST-dark but IRAC | Kohno | EA | 12-m | 3 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | and ALMA-detected galaxy behind a lensing cluster | | | | |
| 00:44:05 | 01:40:36 | 2019.1.00949.S | MJ0417-I_d_03_TM1 | A triple-image HST-dark but IRAC and ALMA-detected galaxy behind a lensing cluster | Kohno | EA | 12-m | 3 |
| 00:40:43 | 01:56:14 | 2019.2.00134.S | NGC1365_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 00:40:20 | 02:01:43 | 2019.2.00134.S | NGC1365_a_03_7M | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | 7-m | 3 |

**2019-12-27**

| Start (UT) | End (UT) | Project Code | SchedBlock | Project Title | PI | Executive | Array | Band |
|---|---|---|---|---|---|---|---|---|
| 23:46:19 | 00:43:48 | 2019.1.00949.S | MJ0417-I_c_03_TM1 | A triple-image HST-dark but IRAC and ALMA-detected galaxy behind a lensing cluster | Kohno | EA | 12-m | 3 |
| 23:32:54 | 00:40:34 | 2019.2.00236.S | NGC253_a_03_TP | Mapping NGC253 in dense gas tracers with ACA | Bešli | EU | Total Power | 3 |
| 23:16:16 | 00:40:13 | 2019.1.00673.S | RCS_J231_a_03_7M | The highest resolution imaging of the Sunyaev-Zel'dovich effect at z~1 | Kitayama | EA | 7-m | 3 |
| 22:17:41 | 23:27:37 | 2019.2.00236.S | NGC253_a_03_TP | Mapping NGC253 in dense gas tracers with ACA | Bešli | EU | Total Power | 3 |
| 21:56:53 | 23:16:10 | 2019.1.00673.S | RCS_J231_a_03_7M | The highest resolution imaging of the Sunyaev-Zel'dovich effect at z~1 | Kitayama | EA | 7-m | 3 |
| 21:09:56 | 22:17:34 | 2019.2.00236.S | NGC253_a_03_TP | Mapping NGC253 in dense gas tracers with ACA | Bešli | EU | Total Power | 3 |
| 20:37:00 | 21:56:48 | 2019.1.00673.S | RCS_J231_a_03_7M | The highest resolution imaging of the Sunyaev-Zel'dovich effect at z~1 | Kitayama | EA | 7-m | 3 |
| 11:06:22 | 12:06:46 | 2019.1.01124.S | ngc4550_a_03_7M | Which way does it go? Molecular gas in multi-spin stellar counterrotator galaxies | Young | NA | 7-m | 3 |
| 10:08:58 | 11:39:57 | 2019.1.01600.S | AS2COS00_a_03_TM1 | A complete census of spectroscopic redshift of 850 micron selected high-redshift HyLIRGs | Chen | EU | 12-m | 3 |
| 09:48:37 | 11:06:15 | 2019.1.01124.S | ngc4550_a_03_7M | Which way does it go? Molecular gas in multi-spin stellar counterrotator galaxies | Young | NA | 7-m | 3 |
| 08:51:39 | 10:08:49 | 2019.1.01016.T | GRBpol_b_03_TM1 | Radio Polarlimetry of GRB Afterglows | Urata | EA | 12-m | 3 |
| 08:34:12 | 09:48:00 | 2019.2.00194.S | J1055+11_a_03_7M | Quasar Feedback Survey: The impact of jets and outflows on the molecular ISM of quasar host galaxies | Calistro Rivera | EU | 7-m | 3 |
| 07:34:05 | 08:51:32 | 2019.1.01016.T | GRBpol_b_03_TM1 | Radio Polarlimetry of GRB Afterglows | Urata | EA | 12-m | 3 |
| 07:32:15 | 08:33:32 | 2019.2.00194.S | J0945+17_a_03_7M | Quasar Feedback Survey: The impact of jets and outflows on the molecular ISM of quasar host galaxies | Calistro Rivera | EU | 7-m | 3 |
| 06:22:11 | 07:32:08 | 2019.2.00062.S | Horsekne_a_03_7M | Unlocking the Potential of the Most Definitive Molecular Tracer of UV-Enhancement: l-C3H+ | Lipnicky | NA | 7-m | 3 |
| 06:13:30 | 07:33:58 | 2019.1.01016.T | GRBpol_b_03_TM1 | Radio Polarlimetry of GRB Afterglows | Urata | EA | 12-m | 3 |
| 05:45:04 | 06:16:47 | 2019.2.00235.S | HD_50896_a_03_7M | A legacy survey of Wolf-Rayet star winds | Phillips | EU | 7-m | 3 |
| 05:14:43 | 06:12:38 | 2019.1.00949.S | MJ0417-I_c_03_TM1 | A triple-image HST-dark but IRAC and ALMA-detected galaxy behind a lensing cluster | Kohno | EA | 12-m | 3 |
| 04:12:05 | 05:14:37 | 2019.1.00949.S | MJ0417-I_b_03_TM1 | A triple-image HST-dark but IRAC and ALMA-detected galaxy behind a lensing cluster | Kohno | EA | 12-m | 3 |
| 04:11:16 | 05:43:53 | 2019.1.00722.S | 2MASX_J0_a_03_7M | Deep CO(J=1-0) mapping survey of 103 Eridanus supergroup galaxies with Morita array | Morokuma | EA | 7-m | 3 |
| 03:18:56 | 04:36:52 | 2019.2.00097.S | 2MASS_J0_a_03_TP | Probing the physical and chemical structure of dense cores: toward understanding methanol formation | Harsono | EA | Total Power | 3 |
| 03:11:59 | 04:11:57 | 2019.1.00949.S | MJ0417-I_b_03_TM1 | A triple-image HST-dark but IRAC and ALMA-detected galaxy behind a lensing cluster | Kohno | EA | 12-m | 3 |
| 02:41:01 | 04:10:22 | 2019.1.00722.S | 2MASX_J0_a_03_7M | Deep CO(J=1-0) mapping survey | Morokuma | EA | 7-m | 3 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | of 103 Eridanus supergroup galaxies with Morita array | | | | |
| 02:08:58 | 03:11:21 | 2019.1.00949.S | MJ0417-I_a_03_TM1 | A triple-image HST-dark but IRAC and ALMA-detected galaxy behind a lensing cluster | Kohno | EA | 12-m | 3 |
| 01:36:03 | 02:37:47 | 2019.2.00134.S | NGC_1546_a_03_7M | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | 7-m | 3 |
| 00:50:30 | 01:38:57 | 2019.1.01537.S | GS4_4236_a_04_TM1 | A joint ALMA-KMOS program to probe the ISM physics and galaxy evolution at z~2 | Curti | EU | 12-m | 4 |

**2019-12-26**

| Start (UT) | End (UT) | Project Code | SchedBlock | Project Title | PI | Executive | Array | Band |
|---|---|---|---|---|---|---|---|---|
| 23:46:22 | 01:20:58 | 2019.1.00722.S | 2MASX_J0_a_03_7M | Deep CO(J=1-0) mapping survey of 103 Eridanus supergroup galaxies with Morita array | Morokuma | EA | 7-m | 3 |
| 23:46:00 | 00:50:24 | 2019.1.00949.S | MJ0417-I_a_03_TM1 | A triple-image HST-dark but IRAC and ALMA-detected galaxy behind a lensing cluster | Kohno | EA | 12-m | 3 |
| 22:54:28 | 23:42:49 | 2019.1.01537.S | GS4_4236_a_04_TM1 | A joint ALMA-KMOS program to probe the ISM physics and galaxy evolution at z~2 | Curti | EU | 12-m | 4 |
| 21:48:34 | 23:08:15 | 2019.1.00673.S | RCS_J231_a_03_7M | The highest resolution imaging of the Sunyaev-Zel'dovich effect at z~1 | Kitayama | EA | 7-m | 3 |
| 20:26:17 | 21:46:21 | 2019.1.00673.S | RCS_J231_a_03_7M | The highest resolution imaging of the Sunyaev-Zel'dovich effect at z~1 | Kitayama | EA | 7-m | 3 |
| 18:02:34 | 19:22:32 | 2019.1.01556.S | SDC13_a_03_TP | On the universality of fibres in star forming filaments | Williams | EU | Total Power | 3 |
| 16:38:37 | 18:02:27 | 2019.1.01556.S | SDC13_a_03_TP | On the universality of fibres in star forming filaments | Williams | EU | Total Power | 3 |
| 15:14:13 | 16:38:30 | 2019.1.01556.S | SDC13_a_03_TP | On the universality of fibres in star forming filaments | Williams | EU | Total Power | 3 |
| 14:02:55 | 15:04:11 | 2019.1.01117.S | M83_a_04_TM1 | Evolution of Molecular Clouds Traced by Deuterium Fractionation Ratio in M83 | Watanabe | EA | 12-m | 4 |
| 13:54:45 | 15:13:44 | 2019.1.01326.S | Position_m_03_TP | Localized Feedback Processes in the Galactic CMZ | Candelaria | NA | Total Power | 3 |
| 13:33:08 | 15:03:20 | 2019.1.01556.S | SDC13_a_03_7M | On the universality of fibres in star forming filaments | Williams | EU | 7-m | 3 |
| 13:01:03 | 14:02:49 | 2019.1.01117.S | M83_a_04_TM1 | Evolution of Molecular Clouds Traced by Deuterium Fractionation Ratio in M83 | Watanabe | EA | 12-m | 4 |
| 12:10:41 | 12:54:59 | 2019.1.01514.S | SMG_a_1_04_TM1 | Confirming large-scale structures of dusty galaxies around enormous Lyman-alpha nebulae and high-z quasars | Arrigoni Battaia | EU | 12-m | 4 |
| 12:06:17 | 13:32:33 | 2019.1.01251.S | Q1416+26_a_04_7M | SUPERCOLD-CGM: a high-z survey of molecular gas across the circum-galactic medium of Enormous Lya Nebulae | Emonts | NA | 7-m | 4 |
| 11:00:38 | 12:19:30 | 2019.2.00166.S | Musca_c_03_TP | Velocity and density power spectra along the Musca filament: Hints to the origin of the star formation properties | Arzoumanian | EU | Total Power | 3 |
| 10:53:42 | 12:03:04 | 2019.1.01031.S | CN1_a_03_TM1 | Magnetic Fields in CN-Bright Molecular Clouds | Barnes | NA | 12-m | 3 |
| 10:27:22 | 11:57:15 | 2019.1.01251.S | Q1227+28_a_04_7M | SUPERCOLD-CGM: a high-z survey of molecular gas across the circum-galactic medium of Enormous Lya Nebulae | Emonts | NA | 7-m | 4 |
| 09:48:20 | 10:44:54 | 2019.1.00562.S | ngc_4302_a_03_TM2 | Resolving the Disk Thickness of the perfect edge-on galaxy NGC 4302 | Yim | EA | 12-m | 3 |
| 09:22:02 | 10:42:40 | 2019.2.00166.S | Musca_c_03_TP | Velocity and density power spectra along the Musca filament: Hints to the origin of the star formation properties | Arzoumanian | EU | Total Power | 3 |
| 09:08:49 | 10:26:41 | 2019.1.01124.S | ngc4550_a_03_7M | Which way does it go? Molecular gas in multi-spin stellar counterrotator galaxies | Young | NA | 7-m | 3 |
| 08:37:08 | 09:08:13 | 2019.2.00235.S | HD_86161_a_03_7M | A legacy survey of Wolf-Rayet star winds | Phillips | EU | 7-m | 3 |
| 08:17:03 | 09:48:14 | 2019.1.01600.S | AS2COS00_a_03_TM1 | A complete census of spectroscopic redshift of 850 | Chen | EU | 12-m | 3 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | micron selected high-redshift HyLIRGs | | | | |
| 07:55:15 | 09:21:55 | 2019.2.00052.S | NGC2859_a_03_TP | Systematically Measuring CO emission of Double-Barred Galaxies | Wu | EA | Total Power | 3 |
| 07:34:41 | 08:36:30 | 2019.2.00235.S | HD_92740_a_03_7M | A legacy survey of Wolf-Rayet star winds | Phillips | EU | 7-m | 3 |
| 07:24:22 | 07:48:28 | 2019.1.01484.T | GRB_1912_b_03_TM1 | Gamma-ray Burst Physics with ALMA: Direct Implications for the Explosions and Progenitors | Laskar | EU | 12-m | 3 |
| 06:27:35 | 07:06:12 | 2019.2.00134.S | NGC_2997_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 06:27:25 | 06:57:29 | 2019.2.00155.S | HerBS-88_a_03_7M | The home stretch: Completing the redshift catalogue of a large flux-limited high-redshift Herschel sample | Bakx | EA | 7-m | 3 |
| 05:54:01 | 07:24:16 | 2019.1.01600.S | AS2COS00_a_03_TM1 | A complete census of spectroscopic redshift of 850 micron selected high-redshift HyLIRGs | Chen | EU | 12-m | 3 |
| 05:12:54 | 06:27:18 | 2019.2.00062.S | Mon_R2_a_04_7M | Unlocking the Potential of the Most Definitive Molecular Tracer of UV-Enhancement: l-C3H+ | Lipnicky | NA | 7-m | 4 |
| 05:03:36 | 06:27:28 | 2019.2.00062.S | Horsekne_a_03_TP | Unlocking the Potential of the Most Definitive Molecular Tracer of UV-Enhancement: l-C3H+ | Lipnicky | NA | Total Power | 3 |
| 04:51:34 | 05:53:52 | 2019.1.00236.S | MJ0553-I_d_03_TM1 | Strongly Lensed HST-dark Object Discovered by ALMA Lensing Cluster Survey | Fujimoto | EA | 12-m | 3 |
| 03:49:01 | 04:51:28 | 2019.1.00236.S | MJ0553-I_d_03_TM1 | Strongly Lensed HST-dark Object Discovered by ALMA Lensing Cluster Survey | Fujimoto | EA | 12-m | 3 |
| 03:38:45 | 05:03:29 | 2019.2.00062.S | Horsekne_a_03_TP | Unlocking the Potential of the Most Definitive Molecular Tracer of UV-Enhancement: l-C3H+ | Lipnicky | NA | Total Power | 3 |
| 03:35:41 | 05:12:47 | 2019.1.00722.S | 2MASX_J0_a_03_7M | Deep CO(J=1-0) mapping survey of 103 Eridanus supergroup galaxies with Morita array | Morokuma | EA | 7-m | 3 |
| 02:37:59 | 03:46:46 | 2019.1.00486.S | SPT0457-_a_03_TM1 | Completing the SPT+ALMA Redshift Survey | Reuter | NA | 12-m | 3 |
| 02:17:52 | 03:37:19 | 2019.2.00134.S | NGC1365_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 02:04:54 | 03:34:36 | 2019.1.00722.S | 2MASX_J0_a_03_7M | Deep CO(J=1-0) mapping survey of 103 Eridanus supergroup galaxies with Morita array | Morokuma | EA | 7-m | 3 |
| 02:04:25 | 02:37:21 | 2019.1.01663.S | SN2018ht_a_03_TM1 | Testing the Connection Between Fast Radio Bursts and Superluminous Supernovae with ALMA | Eftekhari | NA | 12-m | 3 |
| 00:49:00 | 01:50:55 | 2019.2.00134.S | NGC_1546_a_03_7M | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | 7-m | 3 |
| 00:32:00 | 01:38:25 | 2019.1.01136.S | 8081-370_a_03_TM1 | Resolving the rapid quenching of star formation in the local Universe | Rowlands | NA | 12-m | 3 |

## 2019-12-25

| Start (UT) | End (UT) | Project Code | SchedBlock | Project Title | PI | Executive | Array | Band |
|---|---|---|---|---|---|---|---|---|
| 23:25:41 | 00:31:54 | 2019.1.01136.S | 8081-370_a_03_TM1 | Resolving the rapid quenching of star formation in the local Universe | Rowlands | NA | 12-m | 3 |
| 23:20:52 | 00:48:28 | 2019.1.00722.S | IC_1898_a_03_7M | Deep CO(J=1-0) mapping survey of 103 Eridanus supergroup galaxies with Morita array | Morokuma | EA | 7-m | 3 |
| 14:51:42 | 15:53:16 | 2019.1.01117.S | M83_a_04_TM1 | Evolution of Molecular Clouds Traced by Deuterium Fractionation Ratio in M83 | Watanabe | EA | 12-m | 4 |
| 13:45:35 | 14:47:53 | 2019.1.00790.S | cB58_a_03_TM1 | Dense molecular gas as a test for star formation laws at z=2-3 | Man | NA | 12-m | 3 |
| 13:26:41 | 14:45:33 | 2019.1.01326.S | Position_m_03_TP | Localized Feedback Processes in the Galactic CMZ | Candelaria | NA | Total Power | 3 |
| 12:43:47 | 14:05:52 | 2019.1.01124.S | ngc4550_a_03_7M | Which way does it go? Molecular gas in multi-spin stellar counterrotator galaxies | Young | NA | 7-m | 3 |
| 12:39:40 | 13:45:28 | 2019.1.00130.S | NGC4418_a_03_TM1 | A decisive answer on the carbon isotopic ratio in galaxies with ALMA | Martin | EU | 12-m | 3 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 12:07:46 | 13:26:34 | 2019.2.00166.S | Musca_c_03_TP | Velocity and density power spectra along the Musca filament: Hints to the origin of the star formation properties | Arzoumanian | EU | Total Power | 3 |
| 11:16:03 | 12:22:20 | 2019.1.00130.S | NGC4418_a_03_TM1 | A decisive answer on the carbon isotopic ratio in galaxies with ALMA | Martin | EU | 12-m | 3 |
| 11:13:28 | 12:43:06 | 2019.1.01251.S | Q1416+26_a_04_7M | SUPERCOLD-CGM: a high-z survey of molecular gas across the circum-galactic medium of Enormous Lya Nebulae | Emonts | NA | 7-m | 4 |
| 10:29:55 | 11:49:14 | 2019.2.00166.S | Musca_c_03_TP | Velocity and density power spectra along the Musca filament: Hints to the origin of the star formation properties | Arzoumanian | EU | Total Power | 3 |
| 10:15:22 | 11:15:56 | 2019.1.01305.S | ngc5101_a_06_TM1 | The direct measurement of the bar pattern speed of galaxies | Tanaka | EA | 12-m | 6 |
| 09:48:22 | 10:13:54 | 2019.1.01702.S | 13854_a_06_TM1 | The physics of the ISM with CO and neutral CI: the final piece | Valentino | EU | 12-m | 6 |
| 09:32:38 | 11:06:06 | 2019.1.01251.S | Q1227+28_a_04_7M | SUPERCOLD-CGM: a high-z survey of molecular gas across the circum-galactic medium of Enormous Lya Nebulae | Emonts | NA | 7-m | 4 |
| 09:18:40 | 10:29:47 | 2019.2.00134.S | NGC_2997_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 08:48:54 | 09:47:31 | 2019.1.01634.L | UVISTA-Z_b_06_TM1 | REBELS: An ALMA Large Program to Discover the Most Luminous [CII]+[OIII] Galaxies in the Reionization Epoch | Bouwens | CL EA EU NA | 12-m | 6 |
| 08:10:48 | 09:32:07 | 2019.2.00097.S | 2MASS_J0_b_04_7M | Probing the physical and chemical structure of dense cores: toward understanding methanol formation | Harsono | EA | 7-m | 4 |
| 08:06:28 | 09:18:07 | 2019.2.00134.S | NGC_2997_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 07:17:33 | 08:48:49 | 2019.1.01600.S | AS2COS00_a_03_TM1 | A complete census of spectroscopic redshift of 850 micron selected high-redshift HyLIRGs | Chen | EU | 12-m | 3 |
| 06:53:59 | 08:05:59 | 2019.2.00134.S | NGC_2997_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 06:49:10 | 08:10:40 | 2019.2.00097.S | 2MASS_J0_b_04_7M | Probing the physical and chemical structure of dense cores: toward understanding methanol formation | Harsono | EA | 7-m | 4 |
| 05:29:56 | 06:53:52 | 2019.2.00062.S | Horsekne_a_03_TP | Unlocking the Potential of the Most Definitive Molecular Tracer of UV-Enhancement: l-C3H+ | Lipnicky | NA | Total Power | 3 |
| 05:27:44 | 06:49:03 | 2019.2.00097.S | 2MASS_J0_b_04_7M | Probing the physical and chemical structure of dense cores: toward understanding methanol formation | Harsono | EA | 7-m | 4 |
| 05:27:08 | 06:57:19 | 2019.1.01600.S | AS2COS00_a_03_TM1 | A complete census of spectroscopic redshift of 850 micron selected high-redshift HyLIRGs | Chen | EU | 12-m | 3 |
| 04:52:48 | 05:27:01 | 2019.2.00235.S | HD_76536_a_03_7M | A legacy survey of Wolf-Rayet star winds | Phillips | EU | 7-m | 3 |
| 04:18:38 | 05:27:00 | 2019.1.00486.S | SPT0457-_a_03_TM1 | Completing the SPT+ALMA Redshift Survey | Reuter | NA | 12-m | 3 |
| 04:05:20 | 05:29:49 | 2019.2.00062.S | Horsekne_a_03_TP | Unlocking the Potential of the Most Definitive Molecular Tracer of UV-Enhancement: l-C3H+ | Lipnicky | NA | Total Power | 3 |
| 04:05:12 | 04:52:40 | 2019.2.00169.S | eso208-2_a_03_7M | Molecular gas in HI eXtreme galaxies | Lutz | EU | 7-m | 3 |
| 03:18:35 | 04:18:31 | 2019.1.01528.S | 1mm.07_a_04_TM1 | A new Benchmark for CO Excitation in Normal High-z Galaxies | Boogaard | EU | 12-m | 4 |
| 02:45:37 | 04:05:13 | 2019.2.00134.S | NGC1365_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 02:42:03 | 04:05:05 | 2019.1.00722.S | IC_1898_a_03_7M | Deep CO(J=1-0) mapping survey of 103 Eridanus supergroup galaxies with Morita array | Morokuma | EA | 7-m | 3 |
| 02:04:50 | 03:05:27 | 2019.1.01528.S | 1mm.02_a_04_TM1 | A new Benchmark for CO Excitation in Normal High-z Galaxies | Boogaard | EU | 12-m | 4 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 01:38:09 | 02:32:39 | 2019.2.00169.S | eso55-13_a_03_7M | Molecular gas in HI eXtreme galaxies | Lutz | EU | 7-m | 3 |
| 01:23:19 | 02:38:39 | 2019.2.00134.S | NGC1365_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 00:45:34 | 01:51:28 | 2019.1.00914.S | Per_18-2_a_03_TM2 | Tracing The Progression of Gas Kinematics from Envelopes to Protostellar Disks | Chen | NA | 12-m | 3 |
| 00:23:21 | 01:25:19 | 2019.2.00052.S | NGC1291_a_03_7M | Systematically Measuring CO emission of Double-Barred Galaxies | Wu | EA | 7-m | 3 |
| 00:10:29 | 00:45:27 | 2019.1.01663.S | SN2017ja_a_03_TM1 | Testing the Connection Between Fast Radio Bursts and Superluminous Supernovae with ALMA | Eftekhari | NA | 12-m | 3 |

**2019-12-24**

| Start (UT) | End (UT) | Project Code | SchedBlock | Project Title | PI | Executive | Array | Band |
|---|---|---|---|---|---|---|---|---|
| 23:55:34 | 01:10:42 | 2019.2.00134.S | NGC1365_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 23:12:12 | 00:10:22 | 2019.1.01528.S | 1mm.1_a_04_TM1 | A new Benchmark for CO Excitation in Normal High-z Galaxies | Boogaard | EU | 12-m | 4 |
| 23:03:16 | 00:23:14 | 2019.1.00673.S | RCS_J231_a_03_7M | The highest resolution imaging of the Sunyaev-Zel'dovich effect at z~1 | Kitayama | EA | 7-m | 3 |
| 21:59:50 | 23:04:11 | 2019.1.01729.S | UGC12915_a_03_TM1 | Shocks and Star Formation across the Taffy system | García-Rodríguez | EU | 12-m | 3 |
| 21:22:49 | 22:42:50 | 2019.1.00673.S | RCS_J231_a_03_7M | The highest resolution imaging of the Sunyaev-Zel'dovich effect at z~1 | Kitayama | EA | 7-m | 3 |
| 20:55:28 | 21:59:43 | 2019.1.01729.S | UGC12915_a_03_TM1 | Shocks and Star Formation across the Taffy system | García-Rodríguez | EU | 12-m | 3 |
| 19:55:16 | 21:15:19 | 2019.1.00673.S | RCS_J231_a_03_7M | The highest resolution imaging of the Sunyaev-Zel'dovich effect at z~1 | Kitayama | EA | 7-m | 3 |
| 19:41:20 | 20:47:57 | 2019.2.00146.S | I19368_a_03_TP | Tracing the Flow into Dense Cores in High-Mass Star Forming Filaments | Lu | EA | Total Power | 3 |
| 18:25:23 | 19:55:09 | 2019.1.01556.S | SDC13_a_03_7M | On the universality of fibres in star forming filaments | Williams | EU | 7-m | 3 |
| 17:58:00 | 19:14:02 | 2019.1.01556.S | SDC13_a_03_TP | On the universality of fibres in star forming filaments | Williams | EU | Total Power | 3 |
| 16:28:48 | 17:49:08 | 2019.1.01326.S | Position_g_03_TP | Localized Feedback Processes in the Galactic CMZ | Candelaria | NA | Total Power | 3 |
| 15:11:21 | 16:28:23 | 2019.1.01556.S | SDC13_a_03_TP | On the universality of fibres in star forming filaments | Williams | EU | Total Power | 3 |
| 13:55:00 | 15:10:57 | 2019.1.01556.S | SDC13_a_03_TP | On the universality of fibres in star forming filaments | Williams | EU | Total Power | 3 |
| 13:39:55 | 14:13:06 | 2019.1.01326.S | Position_j_03_7M | Localized Feedback Processes in the Galactic CMZ | Candelaria | NA | 7-m | 3 |
| 12:49:57 | 13:52:12 | 2019.1.00790.S | cB58_a_03_TM1 | Dense molecular gas as a test for star formation laws at z=2-3 | Man | NA | 12-m | 3 |
| 12:13:27 | 13:39:48 | 2019.1.01251.S | Q1416+26_a_04_7M | SUPERCOLD-CGM: a high-z survey of molecular gas across the circum-galactic medium of Enormous Lya Nebulae | Emonts | NA | 7-m | 4 |
| 11:43:47 | 12:49:51 | 2019.1.00130.S | NGC4418_a_03_TM1 | A decisive answer on the carbon isotopic ratio in galaxies with ALMA | Martin | EU | 12-m | 3 |
| 11:19:37 | 11:43:41 | 2019.1.01484.T | GRB_1912_a_03_TM1 | Gamma-ray Burst Physics with ALMA: Direct Implications for the Explosions and Progenitors | Laskar | EU | 12-m | 3 |
| 11:06:03 | 12:23:15 | 2019.2.00031.S | Centauru_a_03_TP | Probing the Embedded Disk of the Giant Elliptical NGC 5128 (Centaurus A) | Espada | EA | Total Power | 3 |
| 10:55:52 | 12:11:52 | 2019.1.01804.S | EVCC2148_a_03_7M | A GEMS CO follow-up survey of IC 1459 group and NGC 4636 group | Lee | EA | 7-m | 3 |
| 09:55:28 | 11:11:31 | 2019.1.01016.T | GRBpol_a_03_TM1 | Radio Polarlimetry of GRB Afterglows | Urata | EA | 12-m | 3 |
| 09:51:35 | 10:58:24 | 2019.2.00134.S | NGC_2997_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 09:31:58 | 10:48:32 | 2019.1.01804.S | EVCC2148_a_03_7M | A GEMS CO follow-up survey of IC 1459 group and NGC 4636 group | Lee | EA | 7-m | 3 |
| 08:44:30 | 09:51:28 | 2019.2.00134.S | NGC_2997_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 08:36:44 | 09:55:22 | 2019.1.01016.T | GRBpol_a_03_TM1 | Radio Polarlimetry of GRB Afterglows | Urata | EA | 12-m | 3 |
| 07:58:54 | 09:31:50 | 2019.1.01016.T | GRBpol_b_05_7M | Radio Polarlimetry of GRB Afterglows | Urata | EA | 7-m | 5 |
| 07:36:50 | 08:44:23 | 2019.2.00134.S | NGC_2997_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 07:15:49 | 08:36:37 | 2019.1.01016.T | GRBpol_a_03_TM1 | Radio Polarlimetry of GRB Afterglows | Urata | EA | 12-m | 3 |
| 06:31:00 | 07:58:46 | 2019.1.01016.T | GRBpol_b_04_7M | Radio Polarlimetry of GRB Afterglows | Urata | EA | 7-m | 4 |
| 06:29:28 | 07:36:43 | 2019.2.00134.S | NGC_2997_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 06:08:31 | 07:15:23 | 2019.1.00202.S | WISE_J08_a_03_TM1 | Is the unique ultracool object closest to Earth radio-loud? | Ivanov | EU | 12-m | 3 |
| 05:56:40 | 06:28:13 | 2019.2.00235.S | gam02_Ve_a_03_7M | A legacy survey of Wolf-Rayet star winds | Phillips | EU | 7-m | 3 |
| 05:03:24 | 06:28:44 | 2019.2.00134.S | NGC_1546_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 05:01:06 | 06:08:24 | 2019.1.00202.S | WISE_J08_a_03_TM1 | Is the unique ultracool object closest to Earth radio-loud? | Ivanov | EU | 12-m | 3 |
| 04:24:01 | 05:56:33 | 2019.1.00722.S | 2MASX_J0_a_03_7M | Deep CO(J=1-0) mapping survey of 103 Eridanus supergroup galaxies with Morita array | Morokuma | EA | 7-m | 3 |
| 04:20:57 | 04:59:19 | 2019.1.00597.S | 8728-127_a_03_TM1 | Cold gas on the red sequence: resolving maintenance-mode feedback in action | Belfiore | EU | 12-m | 3 |
| 03:48:42 | 04:20:07 | 2019.1.01663.S | SN2018ib_a_03_TM1 | Testing the Connection Between Fast Radio Bursts and Superluminous Supernovae with ALMA | Eftekhari | NA | 12-m | 3 |
| 03:38:00 | 05:03:19 | 2019.2.00134.S | NGC_1546_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 03:00:57 | 04:23:52 | 2019.1.00722.S | IC_1898_a_03_7M | Deep CO(J=1-0) mapping survey of 103 Eridanus supergroup galaxies with Morita array | Morokuma | EA | 7-m | 3 |
| 02:52:01 | 03:47:23 | 2019.1.01528.S | 1mm.04_a_04_TM1 | A new Benchmark for CO Excitation in Normal High-z Galaxies | Boogaard | EU | 12-m | 4 |
| 02:12:36 | 03:37:53 | 2019.2.00134.S | NGC_1546_a_03_TP | An ACA Survey of Dense Gas in Nearby Galaxies | Usero | EU | Total Power | 3 |
| 01:44:24 | 02:47:52 | 2019.1.00914.S | Per_18-2_a_03_TM2 | Tracing The Progression of Gas Kinematics from Envelopes to Protostellar Disks | Chen | NA | 12-m | 3 |
| 01:37:05 | 03:00:50 | 2019.2.00169.S | eso417-1_a_03_7M | Molecular gas in HI eXtreme galaxies | Lutz | EU | 7-m | 3 |
| 00:51:21 | 01:58:38 | 2019.2.00236.S | NGC253_a_03_TP | Mapping NGC253 in dense gas tracers with ACA | Bešli | EU | Total Power | 3 |
| 00:24:34 | 01:30:10 | 2019.1.00914.S | Per_18-2_a_03_TM2 | Tracing The Progression of Gas Kinematics from Envelopes to Protostellar Disks | Chen | NA | 12-m | 3 |
| 00:07:12 | 00:23:29 | 2019.1.01136.S | 9194-370_a_03_TM1 | Resolving the rapid quenching of star formation in the local Universe | Rowlands | NA | 12-m | 3 |
| 00:06:14 | 01:24:15 | 2019.1.00722.S | IC_1898_a_03_7M | Deep CO(J=1-0) mapping survey of 103 Eridanus supergroup galaxies with Morita array | Morokuma | EA | 7-m | 3 |

**2019-12-23**

| Start (UT) | End (UT) | Project Code | SchedBlock | Project Title | PI | Executive | Array | Band |
|---|---|---|---|---|---|---|---|---|
| 23:42:57 | 00:50:42 | 2019.2.00236.S | NGC253_a_03_TP | Mapping NGC253 in dense gas tracers with ACA | Bešli | EU | Total Power | 3 |
| 23:39:18 | 23:56:05 | 2019.1.01136.S | 8080-370_a_03_TM1 | Resolving the rapid quenching of star formation in the local Universe | Rowlands | NA | 12-m | 3 |
| 22:46:22 | 00:06:05 | 2019.1.00673.S | RCS_J231_a_03_7M | The highest resolution imaging of the Sunyaev-Zel'dovich effect at z~1 | Kitayama | EA | 7-m | 3 |
| 22:29:19 | 23:03:10 | 2019.1.01663.S | SN2018ff_b_03_TM1 | Testing the Connection Between Fast Radio Bursts and Superluminous Supernovae with ALMA | Eftekhari | NA | 12-m | 3 |
| 22:18:46 | 23:28:25 | 2019.2.00236.S | NGC253_a_03_TP | Mapping NGC253 in dense gas tracers with ACA | Bešli | EU | Total Power | 3 |
| 21:49:08 | 22:27:24 | 2019.1.01477.S | HerBS-10_c_03_TM1 | A comprehensive ALMA Redshift Survey of the Brightest Herschel | Urquhart | EU | 12-m | 3 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Galaxies | | | | |
| 21:19:42 | 22:39:04 | 2019.1.00673.S | RCS_J231_a_03_7M | The highest resolution imaging of the Sunyaev-Zel'dovich effect at z~1 | Kitayama | EA | 7-m | 3 |
| 21:16:37 | 21:48:22 | 2019.1.01477.S | HerBS-10_h_03_TM1 | A comprehensive ALMA Redshift Survey of the Brightest Herschel Galaxies | Urquhart | EU | 12-m | 3 |
| 21:03:38 | 22:11:22 | 2019.2.00236.S | NGC253_a_03_TP | Mapping NGC253 in dense gas tracers with ACA | Bešli | EU | Total Power | 3 |
| 20:31:33 | 21:03:14 | 2019.1.01477.S | HerBS-10_m_03_TM1 | A comprehensive ALMA Redshift Survey of the Brightest Herschel Galaxies | Urquhart | EU | 12-m | 3 |
| 19:59:54 | 21:19:35 | 2019.1.00673.S | RCS_J231_a_03_7M | The highest resolution imaging of the Sunyaev-Zel'dovich effect at z~1 | Kitayama | EA | 7-m | 3 |
| 19:52:36 | 21:03:31 | 2019.2.00146.S | I19368_a_03_TP | Tracing the Flow into Dense Cores in High-Mass Star Forming Filaments | Lu | EA | Total Power | 3 |
| 19:52:10 | 20:22:50 | 2019.1.01477.S | HerBS-10_d_03_TM1 | A comprehensive ALMA Redshift Survey of the Brightest Herschel Galaxies | Urquhart | EU | 12-m | 3 |