

GBT Observing Schedule for December 2004

| Proposal | Investigators | Institute | NRAO Friend | Title | Bands | Back Ends | Days * | Hrs * |
|------------|---|---|-------------|--|-------|-----------|------------------|---------|
| BB191 | Barvainis, R. E. Ulvestad, J. Birkinshaw, M. Lehar, J. | National Science Foundation NRAO University of Bristol CombinatoRx | | Are Radio-Quiet Quasars Superluminal? | C | V | 26 | 10.00 |
| BG155 | Greenhill, L. J. Madejski, G. M. Henkel, C. Peck, A.B. Braatz, J. A. Wilson, A. S. | Harvard-Smithsonian Stanford Max-Planck-Institut fur Radioa CfA NRAO University of Maryland | | Mapping the Accretion disk in the IC2560 AGN and implications for H0 | K | V | 30 | 7.00 |
| BH128 | Hough, D. H. Aars, C. | Trinity University Trinity U | | Deep Imaging of Faint Nuclei in SCR FR-II Quasars and Radio Galaxies with the High Sensitivity Array | X | V | 23 | 8.00 |
| BJ054 | Jackson, N. Browne, I. W. A. York, T. Mao, S. Porcas, R. Biggs, A. | NRAL NRAL Jodrell Bank University of Manchester MPIfR JIVE | | Detection of a third image in CLASS B1030+074 | L | V | 27 | 4.00 |
| BP116 | Piner, B.G. Edwards, P.G. Jones, D. L. Murphy, D. W. | Whittier College Institute of Space and Astrona JPL JPL | | Space VLBI without the Space: Using the High Sensitivity Array to Measure High Brightness Temperatures | C | V | 27 | 6.00 |
| BW076 | Winn, J. Rusin, D. Kochanek, C. S. | CfA CfA Ohio State | | Gravitational lensing by a supermassive black hole [J. Winn] | X | V | 24 | 10.00 |
| GBT01A-029 | Eales, S. Carilli, C. L. Dunne, L. Iverson, R. J. | Cardiff University NRAO Cardiff University Astronomy Technology Centre | | A First Investigation of the Origin of Galaxies with the GBT [S. Eales] | K | S | (2 3) | (24.00) |
| GBT02B-020 | Benford, D. Hunter, T. Staguhn, J | NASA/Goddard Space Flight Center Center for Astrophysics NASA/Goddard Space Flight Center | | Search for Low Excitation Molecular Gas in High Redshift Quasars (CO) [D. Benford] | K | SD | (19 20 21 22 23) | (50.00) |
| GBT02C-025 | Greve, T.R. Iverson, R. J. Carilli, C. L. Papadopoulos, P. P. Lewis, G.F. | Caltech (Physics, Maths and Astronomy) Astronomy Technology Centre NRAO Leiden University Sydney U | | CO(1-0) in the 'big five' high-z sources [T.R. Greve] | K | S | (4 6 7 8 9) | (39.50) |
| GBT02C-050 | Blain, A. Chapman, S. Iverson, R. J. | Caltech Astronomy Caltech Physics Astronomy Technology Centre | | Survey for CO(1-0) from dusty galaxies at the highest redshifts [A. Blain] | K | S | (1 2) | (17.50) |

Gregorian Bands: Q=40-50GHz, K=18-26.5GHz, U=12.4-15.4GHz, X=8.2-10.0GHz, C=3.95-5.85GHz, S=1.73-2.6GHz, L=1.15-1.73GHz

Prime Focus Bands: 3=0.29-0.395GHz, 4=0.385-0.520GHz, 6=0.51-0.69GHz, 8=0.68-0.92GHz, A=0.91-1.23GHz

* [] indicates secondary project; () indicates primary project

Back Ends: 2=S2 recorder, B=BCPM, C=cGBPP, D=Digital Continuum Receiver, O=user supplied, P=Spectral Processor, S=Spectrometer, V=VLBA recorder

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| | Smail, I. Owen, F. N. | University of Durham NRAO-SOC | | | | | | |
| GBT03A-011 | Walter, F. Carilli, C. L. Yun, M. Bertoldi, F. Menten, K. M. Scoville, N. Z. | NRAO New Mexico Facilities NRAO University of Massachusetts MPIfR Max-Planck-Institut Fur Radioa Caltech | | The Molecular Gas Content of Quasars at z~4.5 [F. Walter] | K | S | (11 13 14 15 16 17 18 19) | (109.00) |
| GBT04A-030 | Stairs, I. Thorsett, S. Arzoumanian, Z. Ferdman, R. | University of British Columbia University of California, Santa Cruz NASA/GSFC University of British Columbia | | High-Precision Timing of Binary Pulsars at the GBT [I. Stairs] | L | PG | [31] | [2.00] |
| GBT04B-014 | Kondratko, P.T. Greenhill, L. J. Moran, J. M. Braatz, J. A. | Harvard University Harvard-Smithsonian CfA NRAO | | Anchoring the Extragalactic Distance Scale [P.T. Kondratko] | KU | S | (30 31) | (23.50) |
| GBT04B-026 | Kramer, M. Stairs, I. Camilo, F. McLaughlin, M. Lorimer, D. Lyne, A. G. Manchester, D.R. N. Possenti, A. D'Amico, N. Burgay, M. Freire, Paulo Joshi, B. Ferdman, R. | NRAL University of British Columbia Columbia Astrophysics Laboratory University of Manchester University of Manchester NRAL Australia Telescope Osservatorio di Cagliari Osservatorio di Cagliari Osservatorio di Bologna Arecibo Observatory National Centre for Radio Astrophysics (India) University of British Columbia | | Timing the First Double Pulsar System [M. Kramer] | L8 | OG | [4 6 31] | [11.00] |
| GBT04B-029 | Stairs, I. Camilo, F. Kramer, M. Faulkner, A. McLaughlin, M. Lorimer, D. Lyne, A. G. Hobbs, G. Manchester, D.R. N. Possenti, A. D'Amico, N. Burgay, M. Ferdman, R. Ramachandran, | University of British Columbia Columbia Astrophysics Laboratory NRAL Nuffield Radio Astronomy Laboratories University of Manchester University of Manchester NRAL Australia Telescope National Facility (ATNF) Australia Telescope Osservatorio di Cagliari Osservatorio di Cagliari Osservatorio di Bologna | | Timing New Binary and Millisecond Pulsars from the Parkes Multibeam Survey [I. Stairs] | L | BCOG | [4 6 31] | [6.00] |

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| | R. Backer, D. C. Demorest, P. Nice, D. | University of British Columbia UC Berkeley (Astronomy) University of California, Berkeley UC Berkeley (Physics) Princeton University | | | | | | |
| GBT04C-008 | Pidopryhora, Y. Shields, J. Lockman, F. J. | Ohio University Ohio University NRAO-GB | | Mapping the Galactic Halo HI: Evidence of Outflow from the Galactic Plane? [Y. Pidopryhora] | L | P | 23 [4 6 10 12 18 19 20 22 23 31] | 4.00 [50.50] |
| GBT04C-021 | Wang, Y. Zheng, X.W. Zhang, Q. Ho, P. T. P. | CfA Nanjing University Harvard-Smithsonian Center for Astrophysics Smithsonian Astrophysical Obse | | Large-scale structures, fragmentation and cluster formation in OMC-2 and OMC-3 [Y. Wang] | K | S | (4 5 6 7) | (18.50) |
| GBT04C-022 | Ma, C. Lim, J. | National Taiwan University Academia Sinica, IAA | | Search for HI gas in the Central Molecular-Gas-Rich Elliptical Galaxies of Rich Clusters [C. Ma] | L | S | 27 28 29 30 | 41.50 |
| GBT04C-023 | Knight, H. Jacoby, B. Bailes, M. Ord, S. Kulkarni, S. R. Hotan, H. | Swinburne University of Technology Caltech Astronomy Swinburne University of Technology Swinburne University of Technology Caltech Swinburne University of Technology | | High Time Resolution Giant Pulse Searches [H. Knight] | 8L | O | [14 15 16 17] | [26.00] |
| GBT04C-025 | McLaughlin, M. Lyne, A. G. Kramer, M. Lorimer, D. Stairs, I. Manchester, D.R. N. | University of Manchester NRAL NRAL University of Manchester University of British Columbia Australia Telescope | | Investigating a New Class of Transient Radio Sources [M. McLaughlin] | 8 | G | 5 8 9 [9 11 13] (13) | 12.00 [21.50] (4.25) |
| GBT04C-036 | Ramachandran, R. Deshpande, A.A. Cordes, J. M. Backer, D. C. Freire, Paulo Vlemmings, W. Demorest, P. Deneva, Julia | UC Berkeley (Astronomy) Arecibo Observatory NAIC and Cornell University University of California, Berkeley Arecibo Observatory Cornell University UC Berkeley (Physics) Cornell University | | Searching for young pulsars in the Cygnus Super Bubble region [R. Ramachandran] | S | G | [1 3 4 5 6 7 8 9 10 11 12 13 18 19 20 21 22] | [62.00] |
| GBT04C-039 | Bower, G. C. Ramachandran, R. Muno, M. P. | UC Berkeley UC Berkeley (Astronomy) UC Los Angeles MIT | | Searching for Radio Pulsations from X-ray Sources with Radio Counterparts in the Galactic Center [G. C. Bower] | X | G | 20 22 | 9.00 |

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| | Baganoff, F. K. | | | | | | | |
| GBT04C-040 | Margot, J.L. Peale, S. Slade, M. | Cornell University Dept. of Physics, U. of Calif., Santa Barbara JPL | | The interior of Mercury revealed by its spin dynamics [J.L. Margot] | X | O | 10 12 18 19 | 12.50 |
| GBT04C-056 | Demorest, P. Backer, D. C. Ferdman, R. Stairs, I. Nice, D. Ramachandran, R. | UC Berkeley (Physics) University of California, Berkeley University of British Columbia University of British Columbia Princeton University UC Berkeley (Astronomy) | | Precision Timing of Binary and Millisecond Pulsars [P. Demorest] | L8 | COG | (4 6 8 10 14 16) | (24.50) |
| GBT04C-057 | Cameron, Patrick Pannuti, T. Rho, J. Jacoby, B. | Caltech Astronomy MIT Caltech IPAC Caltech Astronomy | | Search for radio pulsations from a new X-ray pulsar in CTB 1 [Patrick Cameron] | 8 | BGS | [4 5 6 7] | [16.50] |
| Comm | Mason | | | Comm Ka | B | DSP | (3 4 5 6 31) | (24.00) |
| Comm | NRAO staff | | | Comm Q band | Q | DSP | (1 7 8 15 17) | (33.00) |
| Shutdown | NRAO staff | | | Un-assigned Shutdown | | | 24 25 26 | 36.00 |
| Maint | NRAO staff | | | Maintenance | | | 1 8 21 28 [3 7 9 14 15 16 17] | 34.00 [59.50] |
| Maint | NRAO staff | | | Shutdown prep | | | 24 | 1.00 |
| Maint | NRAO staff | | | Startup | | | 26 | 1.00 |
| Not Sched | NRAO staff | | | | | | (5 7 8 10 12 13 14 16 18 19 21 24 26) | (44.25) |
| Setup | NRAO staff | | | Observation setup | CKXLU8S | VSDPGOBC | 5 8 9 10 12 18 19 20 22 23 24 26 27 28 29 30 [1 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 31] (1 2 4 6 7 8 9 10 12 13 14 15 16 17 18 19 20 21 22 30 31) | 18.75 [44.00] (30.00) |

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| Tests | NRAO staff | | | M&C Integ | LSC | DSP | 27 29 30 | 15.50 |
| Tests | Braatz | | | M&C Reg | | | [31] | [8.50] |
| Tests | NRAO staff | | | PTCS | CXLKUBSQ | DSP | 1 (9 10 11 12 20 22) | 8.00 (59.75) |
| Tests | NRAO staff | | | RCO*8 800 MHz | 8 | DSP | 1 [1 3] | 1.00 [3.00] |
| Tests | Norrod | | | SPBL | L | DSP | 8 9 | 3.00 |
| Total Hrs | Shutdown | 36.00 | | | | | | |
| | Astronomy | 434.75 | 195.50 | | | | | |
| | Setup | 48.75 | 44.00 | | | | | |
| | Commissioning | 57.00 | | | | | | |
| | Maintenance | 36.00 | 59.50 | | | | | |
| | Un-assigned | 44.25 | | | | | | |
| | Tests | 87.25 | | | | | | |

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