

Scientific Program

October 20, Monday

Scientific Session at the Presidium of the Russian Academy of Sciences,
Leninsky prospekt 32, a

09:00 Registration

Chairman: W. Baan

09:30 K. Kellermann: Brightness Temperature Limits of Compact Radio Sources (25+5)

10:00 N. Kardashev: Some Critical Experiments with RadioAstron (25+5)

10:30 D. Jauncey: Inter-Stellar Scintillation and Micro-Arcsecond Structure in Flat-Spectrum Radio Sources (25+5)

11:00 Y.Y. Kovalev: RadioAstron Survey to Probe AGN Jets at Fine Scales (25+5)

11:30–12:00 Coffee Break

12:00 G. Giovannini: New Results on the Parsec Scale Properties of Submilliarcsecond Structures in Extragalactic Radio Sources (15+5)

12:20 D. Gabuzda: High-Resolution RadioAstron Polarization Observations with Limited Imaging (25+5)

12:50 G. Cimo: Two-dimensional Time Delay Measurements of Fast Scintillator Using VLBI Arrays (15+5)

13:10 L. Gurvits: Redshift-Dependent Properties of Submilliarcsecond Structures in Extragalactic Radio Sources (25+5)

13:40 – 15:00 Lunch Break

Chairman: K. Kellermann

15:00 Y. Gnedin, M. Piotrovich, T. Natsvlshvili: Magnetic Fields of Quasars and Active Galactic Nuclei (25+5)

15:30 A. Lobanov: Studies of Ultracompact Jets with RadioAstron (25+5)

16:00 A. Pushkarev, Y.Y. Kovalev: Adiabatic Expansion and Magnetic Fields in Parsec-Scale AGN Jets (15+5)

16:20 Y.A. Kovalev, Y.Y. Kovalev, N. Nizhelsky, G. Zhekanis.: RATAN-600 Continuum Spectra as a Tool to Select Promising AGN Jets for RadioAstron Studies (15+5)

16:40 N. Bartel: Supernova VLBI with RadioAstron (25+5)

17:10 – 17:40 Coffee Break

17:40 K. Postnov: Radio Emission from Cosmic Gamma-Ray Bursts (15+5)

17:50 W. Baan: OH Masers, OH Megamasers, and Nuclear Starburst (25+5)

18:20 Y. Hagiwara: Water Megamaser Observations with Space-VLBI (25+5)

18:50 M. Garrett, H. Ramparadath, E. Lenc, O. Wucknitz, S. Tingay : An “Adhoc” VLBA 327 MHz Survey (15+5)

October 21, Tuesday

Scientific Session at the Presidium of the Russian Academy of Sciences,
Leninsky prospekt 32, a

Chairman: D. Jauncey

09:30 Y. Murata: The ASTRO-G (VSOP-2) Project (25+5)

10:00 C. Gwinn: Scintillating Pulsars (25+5)

10:30 V. Shishov: Interstellar Scintillations and Nanosecond Resolution in Radio Astronomy (25+5)

11:00 V. Beskin, A. Gurevich, Ya. Istomin: Radio Pulsars: What Is To Be Done? (25+5)

11:30–12:00 Coffee Break

12:00 M. Popov, Y. Ilyasov, V. Zharov: Giant Radio Pulses from the Crab Pulsar as a Calibrator Tool for SVLBI(25+5)

12:30 A. Serber, O.B. Slee, G. Tsarevsky: The Nature of Very Active RS CVn Type Stars and the Possible Identification of its Highly Polarized Emitter (25+5)

13:00 N. Bartel: A Test of the Gravitational Redshift with the RadioAstron (25+5)

13:30 V. Zharov, Y. Ponomarev: Astrometric Goals of the RadioAstron Mission (25+5)

14:00–15:00 Lunch Break

Chairman: A. Zensus

15:00 Y. Parijskij: M-Theories and High Resolution Radio Astronomy (25+5)

15:30 I. Novikov: Wormholes in the Universe and Some Methods of Their Search (25+5)

16:00 S. Blinnikov: Mirror Matter as a Form of Dark Matter and RadioAstron (25+5)

16:30 A. Doroshkevich: Formation, Evolution and Observational Evidences of Super Massive Black Holes (25+5)

17:00–17:30 Coffee Break

Chairman: Y. Parijskij

17:30 L. Matveenko: The Fine Structure of the Ejector Regions and Jets (15+5)

18:00 V. Lukash, B. Stern: How Can Dark Energy Be Measured, Particularly, at Fine Angular Resolution (25+5)

18:30 G. Bisnovatyi-Kogan: Gravitational Radio Spectrometer (25+5)

19:00 M. Pshirkov, A. Tuntsov: Probing Substructure Lensing with RadioAstron (25+5)

October 22, Wednesday

Visit to the Lavochkin Association

Bus starts from the hotel Sputnik at 8:30

10:10 –11:00 Visit to the workshops

Chairman: G. Polishuk

11:00 G. Polishuk, Y. Nosenko: RadioAstron Mission on its Way to Launch (15+5)

11:20 V. Babyshkin: Spacecraft Bus NAVIGATOR for RadioAstron (15+5)

11:40 N. Babakin et al.: Tests of the SRT Construction (15+5)

12:00-12:30 Coffee Break

12:30 M. Artyukhov, K. Sukhanov et al.: RadioAstron Mission Operation and Control (15+5)

12:50 A. Belyaev et al.: On-Board Hydrogen Frequency Standard (15+5)

13:10 E. Akim, R. Bebenin, Y. Ponomarev, V. Stepanyans, A. Tuchin: Navigation of the High-Apogee Orbit of the SRT in RadioAstron Mission (15+5)

13:30 A. Sheikhet: Synthesis of the Spacecraft Orbit for Space-Ground Interferometer (10+5)

13:45 V. Shargorodski et al.: Orbital Measurements by Laser Technique (15+5)

14:05 A. Chebotarev et al.: The Bear Lake Control Station and Kalyazin Radio Telescope (15+5)

14:25 V. Kolesnikov et al.: The Ussuriisk Control Station and Radio Telescope (15+5)

14:45–15:45 Lunch

October 23, Thursday

Session at the Astro Space Centre

Bus starts from the hotel Sputnik at 9:00

Chairman: Y. Ilyasov

10:00 V. Andreyanov, B. Kanevsky, V. Vasil'kov: RadioAstron Science Payload Status and Main Parameters. On-board VIRK Complex. (15+5)

10:20 B. Kanevsky, A. Smirnov: Pushchino Tracking Station (15+5)

10:50 A. Biryukov, B. Novikov et al.: Results of Testing On-Board and Ground Segments of Space Interferometer (15+5)

11:10–11:40 Coffee Break

11:40 G. Langston: Design of Transient Event Detectors for Science Data Tracking Station IS in Green Bank (25+5)

12:10 S. Likhachev: RadioAstron Digital Data Processing at the ASC (25+5)

12:40 Y.Y. Kovalev: Pre-Launch Test Observations in MFS Mode (15+5)

13:00 M. Larionov, M. Popov: Ground Radio Telescope Network in Russia (15+5)

13:20–15:00 Lunch Break

Chairman: B. Burke

15:00 A. Konovalenko, L. Lytvinenko: RT-70 Evpatoria Radio Telescope in RadioAstron (15+5)

15:20 A. Finkelstein et al.: QUASAR Network in RadioAstron (15+5)

15:40 A. Tzioumis: Recent Developments with LBA (15+5)

16:00 A. Bajkova: Multi-Frequency Synthesis Technique in Radio Interferometric Imaging Using Generalized Maximum Entropy Method (15+5)

16:20 L. Kogan: Some Special Aspects of Imaging at Space VLBI (15+5)

16:40 M. Mingaliev, Y. Sotnikova, N. Kardashev and M. Larionov: Spectral Properties and Variability of Radio Sources near the North Celestial Pole (15+5)

17:00 V. Vasil'kov, Y. A. Kovalev, M. Larionov, A. Kovalenko, N. Nikolaev, V. Starikov: Prelaunch Antenna Parameters of SRT-10 from Measurements and Estimations (15+5)

17:30 – *conference dinner*

October 24, Friday

Session at the Astro Space Centre

Bus starts from the hotel Sputnik at 9:00

10:30–11:00 Visit to the laboratory testing of the flight models of the science payload

11:00–11:30 **Coffee Break**

11:30–14:00 **RISC Business Session**

1. RISC membership, cochairman, secretary
2. RISC Terms of Reference
3. Science Programs: Major Large Programs and PI Driven Programs
4. In-Orbit-Checkout (IOC)
5. Access to ground radio telescopes
6. Proposal Evaluation
7. Announcement of Opportunity and Observers Guide
8. Scheduling of the observations
9. Data Correlation
10. Compatibility of recording systems
11. Mission operations

14:00–15:00 **Lunch Break**

15:00 Visit to Pushchino Observatory (optional)