AV-301 is usually the go-to instrument to observe 19F with the capability to do 1H decoupling. The probehead used for 19F observation is also capable of performing 13C NMR and so is an instrument of choice for organic chemists looking for a reliable machine for routine spectroscopy. The alternate probehead PABBI performs computerized tuning and matching simplifying experiment setup.

- **Bruker Avance** series instrument
- 1H Frequency: 300.10 MHz
- 2H field-frequency lock system
- MAGNET and Shim system
  - Oxford Cryomagnet
  - BOSS2 shim system
  - 20 RT shim gradients
  - BSMS/2 keyboard
- Runs on Topspin 2.1, Åi includes ShapeTool and NMRSim
- Host Operating System: Red Hat Enterprise Linux 5.3
- VT range: +25C to +70 C (limited observation time at highest temperature)
- RF Section
  - Two channels (SGU1 and SGU2)
  - 50 W 1H amplifier
  - 200W X amplifier
  - HPPR/2 2H-PASS preamp.
- Digital
  - Digital quadrature detection
  - 5 MHz sampling rate ADC
  - Waveform generation, Åi selective and shifted frequency shaped pulses capable.
- Data
  - Data is stored on individual user's udrive system.
Available Probes

- Bruker PABBI-ATMA 1H (X-BB) - multinuclear (currently installed)
- Bruker TXD: 19F {1H,13C}

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Source URL: https://chem.washington.edu/instruments/av-301