

HOW TO RUN A ROUTINE EXPERIMENT IN THE 400 MHz Neo

BEFORE START – VERY IMPORTANT!!!

1. Use ONLY FLAWLESS NMR tubes (without cracks on the top)

2. Clean your NMR tube (with a tissue impregnate with isoPrOH)

3. Insert the sample into the magnet

3.1. Place your sample in one empty holder of the autosampler (e.g. holder 6)

3.2. Insert the sample into the magnet [`>sx 6`]

3.3. Wait until the sample is recognized [in the BSMS screen, Sample Down ON]

4. Spin the sample (optional) [in the BSMS screen, SPIN ON]

5. Create a new data file [File/New or `>edc`]

6. Read some standard shims [`>rsh` and select “sermn.shim”]

7. Lock the sample [`>lock` and select the solvent]

8. Read parameter set of the experiment [`>rpar sr*` and select experiment]

9. Tune the probe [`>atma` and wait until finished]

10. Optimize shims [`>topshim` and wait until finished]

11. Change acquisition/processing parameters if needed [`>ns ; >sw ; >o1p ; >td ...`]

12. Determine receiver gain [`>rga`]

13. Start data acquisition [`>zg`]

14. Fourier transform FID [`>ft / >xfb`]

15. Apply automatic phase correction [`>apk`]

16. Apply baseline correction [`>absn`]

17. Stop the sample spinning (if spinning) [in the BSMS screen, SPIN OFF]

18. Take out the sample of the magnet [`>sx ej`]

To perform more than one experiment, repeat steps 5, 8, 9, 11, 12, 13 before step 17.

Important: every time you measure a new nucleus you must do “atma” (tune the probe) after reading the new parameter set.