

**bioAFMlab meeting May 1st 2007****From:** "Oosterkamp, Tjerk" <oosterkamp@physics.leidenuniv.nl>**To:** [aartsma@physics.leidenuniv.nl](mailto:aartsma@physics.leidenuniv.nl), [katan@physics.leidenuniv.nl](mailto:katan@physics.leidenuniv.nl), [oosterkamp@physics.leidenuniv.nl](mailto:oosterkamp@physics.leidenuniv.nl), [es@physics.leidenuniv.nl](mailto:es@physics.leidenuniv.nl), [rijsewijk@physics.leidenuniv.nl](mailto:rijsewijk@physics.leidenuniv.nl), [magis@physics.leidenuniv.nl](mailto:magis@physics.leidenuniv.nl), [noort@physics.leidenuniv.nl](mailto:noort@physics.leidenuniv.nl), [Heeres@Physics.LeidenUniv.nl](mailto:Heeres@Physics.LeidenUniv.nl), [stan@physics.leidenuniv.nl](mailto:stan@physics.leidenuniv.nl), [frese@physics.leidenuniv.nl](mailto:frese@physics.leidenuniv.nl), [patil@physics.leidenuniv.nl](mailto:patil@physics.leidenuniv.nl), [k.wagner@chem.leidenuniv.nl](mailto:k.wagner@chem.leidenuniv.nl), [bahatyrova@physics.leidenuniv.nl](mailto:bahatyrova@physics.leidenuniv.nl), [liuln@physics.leidenuniv.nl](mailto:liuln@physics.leidenuniv.nl), [beker@physics.leidenuniv.nl](mailto:beker@physics.leidenuniv.nl), [loo@physics.leidenuniv.nl](mailto:loo@physics.leidenuniv.nl), [a.korobko@chem.leidenuniv.nl](mailto:a.korobko@chem.leidenuniv.nl), "Jager, M. de" <Jager@Physics.LeidenUniv.nl>, Jan-Willem Beenakker <jw@beenakker.com>, "Yuana, Y. \((ONCO)\)" <Y.Yuana@lumc.nl>, [f.wiertz@chem.leidenuniv.nl](mailto:f.wiertz@chem.leidenuniv.nl), [galli@physics.leidenuniv.nl](mailto:galli@physics.leidenuniv.nl), [zhang@physics.leidenuniv.nl](mailto:zhang@physics.leidenuniv.nl), [hendriks@physics.leidenuniv.nl](mailto:hendriks@physics.leidenuniv.nl), [kelly@physics.leidenuniv.nl](mailto:kelly@physics.leidenuniv.nl), [komissarov@physics.leidenuniv.nl](mailto:komissarov@physics.leidenuniv.nl), [boltje@physics.leidenuniv.nl](mailto:boltje@physics.leidenuniv.nl), [janvanostaay@hotmail.com](mailto:janvanostaay@hotmail.com), [he@physics.leidenuniv.nl](mailto:he@physics.leidenuniv.nl)**Date:** 2007-05-01 16:53

present: Werner, Hinke, Anne-France, Federica, Jan-Willem, Dirk, Tjerk

Anne France shows TEM images of all several nanotubes

Federica found out that after doing STM the controller at the wall needed to be restarted in order to make it possible to do Tapping mode AFM again. It is not enough to properly connect the cables and to choose another profile, you have to restart the software.

Federica actually also switched off the controller and switched it on again. We don't know whether both are necessary.

Razvan saw the same thing at the window AFM.

Did anyone else experience this?

Jan-Willem replaced the cables of the MI and the noise dropped.

The break-out box needs better shielding.

The photodiode signals have degraded compared to the old laser that we had.

Hinke Schokker will focus on trying to get a better understanding of dissipation in AFM for her bachelor research.

Werner and Raymond found out what is wrong with the summing module. The digital

Werner found a problem with the batteries of the fast AFM.

Dirk says that the SEM is working well again.

Be careful not to leave the SEM door open for more than one minute.

If you close the door quickly and pump down again within one minute the pressure is in the  $10^{-6}$  range within 30 minutes.

The SEM will be extended with a permanent pressure log system and an alarm if you leave the door open for more than one or two minutes.

The new scope card for the measurement system (100 MS/sec) it works really nicely as a spectrum analyzer.

It has two channels but only one has worked so far.