

**notes bioAFMlab meeting 11 september 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:** 2007-09-11 22:17

present: Dilyana, Maarten, Anne France, Brian, Werner, Tjerk

We discuss Dilyana's experiment and particularly whether a single nanotube on an AFM tip could be put into the plunge freezer. We think that a polymercoated carbon nanotube would not have too much water on it and that the proteins bound to the carbon nanotube would retain enough water to get proper vitrification of the proteins. The question remains whether EM is good enough if only 100 copies of a particular proteins can be looked at for any given experiment.

Brian explains the way he does Force Volume imaging with the MI He circumvents the MI force volume imaging mode which allows him to get much larger data-sets. He is now looking into the curve fitting.

Anne France tells about the TEM pictures on parylene coated nanotubes that were cut in the FIB and later used in an electrochemistry experiment. Unfortunately de EDX could not confirm that the small structures made are actually small gold cones.

Werner solved some new and old issues with the optical detection.