

bio AFM lab meeting 18 sept 2007**From:** "Oosterkamp, Tjerk" <oosterkamp@physics.leidenuniv.nl>**To:** aartsma@physics.leidenuniv.nl, katan@physics.leidenuniv.nl, oosterkamp@physics.leidenuniv.nl, es@physics.leidenuniv.nl, rijsewijk@physics.leidenuniv.nl, magis@physics.leidenuniv.nl, noort@physics.leidenuniv.nl, Heeres@Physics.LeidenUniv.nl, stan@physics.leidenuniv.nl, frese@physics.leidenuniv.nl, patil@physics.leidenuniv.nl, k.wagner@chem.leidenuniv.nl, bahatyrova@physics.leidenuniv.nl, liuln@physics.leidenuniv.nl, beker@physics.leidenuniv.nl, loo@physics.leidenuniv.nl, 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, galli@physics.leidenuniv.nl, zhang@physics.leidenuniv.nl, hendrikx@physics.leidenuniv.nl, kelly@physics.leidenuniv.nl, komissarov@physics.leidenuniv.nl, boltje@physics.leidenuniv.nl, he@physics.leidenuniv.nl**Date:** 2007-09-18 19:47

present: Yuana, Brian, Koen, Werner, Maarten, Tjerk

Yuana and Koen suggest to add a line to the reservation system such that one can reserve the data-analysis computer in 702. Maarten will also do it.

Yuana shows the analysis of the particle sizes. We discuss ways to estimate the error bars. By comparing the number of particles per image for each individual image and comparing these to the average number of particles averaged over six images you can find out whether there is just statistical error or whether the distribution of particles over the mica is inhomogeneous.

Brian shows his measurements of aortic tissue. And wonders about the fact that the spread in effective Young's modulus in thick slices of tissues is larger for a stiff cantilever than for a soft cantilever while for a thin slab of tissue it is the other way around (or was it vice versa?). Tjerk suggests that you might have to plot the data as indentation versus applied force (rather than as force versus piezo distance) to draw this conclusion. For example, it could be that the spread in the stiffness only occurs at high indentation and that you don't reach such an indentation with a soft cantilever.

Werner asks whether anyone used the 100x amplifier in 706. The in and output were switched around and the battery had gone dead.