

Questions, Comments and Answers following the presentation

IR spectroscopy

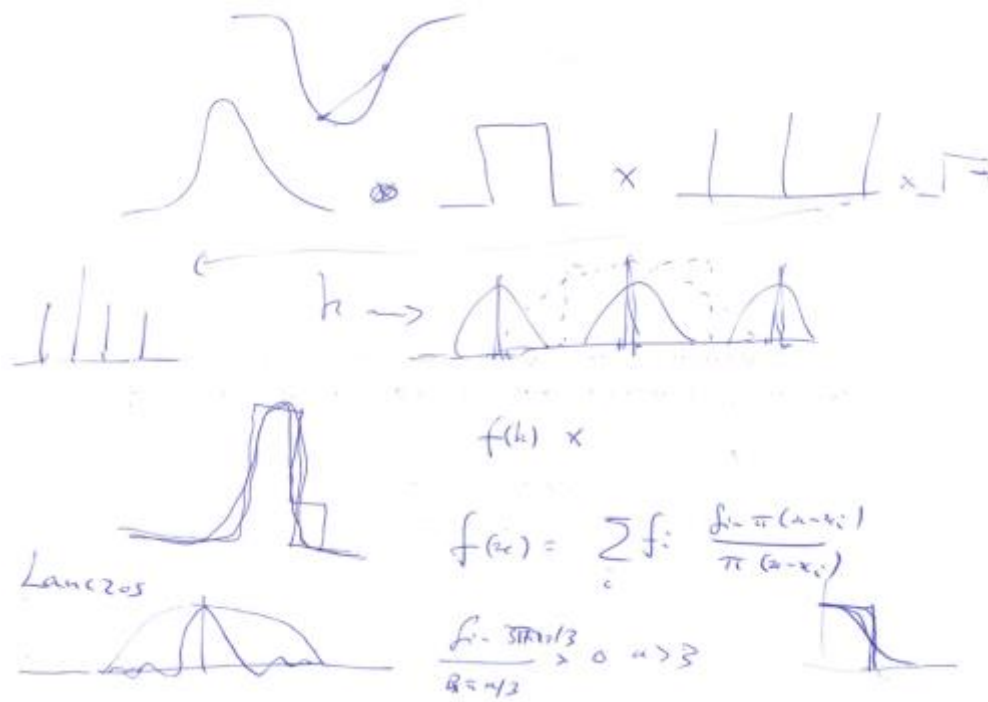
Miwa Goto

Roth: Comment: with regards to your statement "resampling is a sin", one could add that this is also true because of the problem of the introduction of correlated noise.

Chilingarian: The resampling is bad, but undersampling is worse, so it has definitely to be avoided. Also, cubic interpolation with $q=-0.5$ provides the best signal reconstruction as demonstrated by mathematicians.

(to Roth and Chilingarian) Thank you so much for your comments.

Lupton: How close to Nyquist is your sampling? what goes wrong when you use Fourier/Sinc interpolation?



Nave: Have you tried functions for re-sampling other than linear or cubic interpolation?

(to Lupton and Nave) Thank you for your comments. Detector sampling is in most of the cases Nyquist. No, I have not tried resampling in Fourier space yet. We discussed off line if the limited frequency coverage would matter. According to Robert (Lupton), 1024 pixels would be enough. I will try resampling in Fourier space to see if it improves the resampling of the standard star spectra to the science spectra.