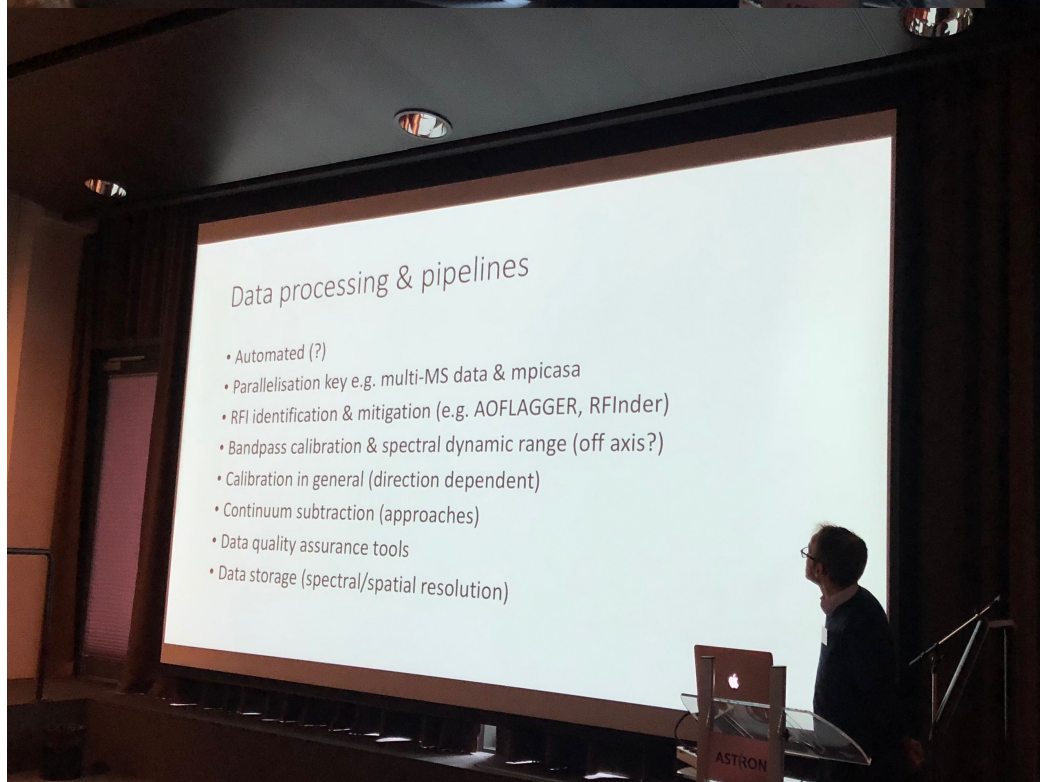


Discussion notes on Survey Tools



Elaine - need a common naming convention for HI absorption system. Want to be able label non-detections. Problem with defining upper limit.

Filipo - how do you measure a width of a line - create a common database.

Elaine - data quality tools. Should we standardise? Make comparisons easier. What is good quality data and what is not? Maybe the telescopes are so different this is not possible? Nassim - systematics play a role. Quality line (4 for good, 1 for marginal).

Line finder is good for telling how believable a line is. James - this is a formal stat you can assign a reliability to.

Vanessa - all surveys provide ascii data, you can systematise how you measure the types of parameters.

Elaine - we need to agree with FITS standards more than ascii.

Vanessa - should use hdf5.

James - how do we deal with extended sources? We might be ok with FLASH but how do we deal with this properly

Vanessa - what about cube lets? How does the size of these scale? How does this scale with size of the source?

Raf - Why do we want a cube for the resolved sources?

James - want to see associated areas on the source.

Nassim - how do you weight your spectrum when the source is resolved if you just want a single line? Complicated.

James - we need a repository of common tools and what people are using.

Resolved continuum and simulations - you might be able to make inferences.

Nassim - have a map of the intervening galaxy, cube model from Briggs et al. You can see the disk but a simple disk makes no sense. You need warps etc to get the spectrum out. Deviations from disks are important, even if they look good. This is an important feature for high-z. How will simulations solve this?

Lister - don't get too excited about simulations. Tell you nothing about the multi-phase nature of ISM at any z. Cold gas is below 10^5 K and no splitting of molecular and atomic gas. Simulations done by scaling, when it is not correct.

Lillian - Associated absorbers you can get somewhere with this but intervening is very

hard to tell amount of ISM components. Simulations are ok statistically, but individual are no good.

Vanessa - What about population models? Simple tools to show how you get different features with different cloud distributions. Simulations can tell us on average but not weird sources.

Star forming galaxies mayn't contain the gas - we could be looking at different . Where is the gas compared to the stars, and do they know about each other.

James - Important to make spectra available. How to quantify bandpass affects. What about value-added catalogues?

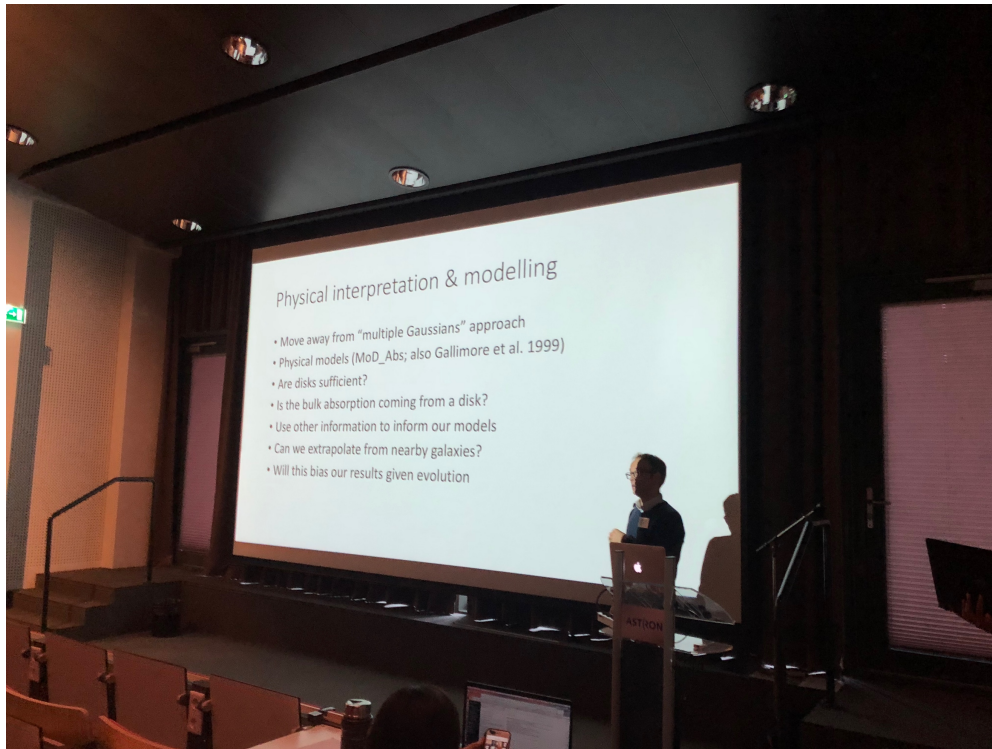
How do you take a HI detection and convert to omega HI for a static approach. dN/Dz - how are the column densities distribution.

Nassim - Do we want omega HI - there are better things. Elaine - it is a proxy for something we do not understand.

Elaine - standardisation of fits parameters. Ideal would be to run any telescopes into any pipeline. Need 1D spec and 1D error spectrum.

Raffaella - Wiki - this is where we can discuss the standardisation.





Physical interpretation & modelling

- Move away from "multiple Gaussians" approach
- Physical models (MoD_Abs; also Gallimore et al. 1999)
- Are disks sufficient?
- Is the bulk absorption coming from a disk?
- Use other information to inform our models
- Can we extrapolate from nearby galaxies?
- Will this bias our results given evolution