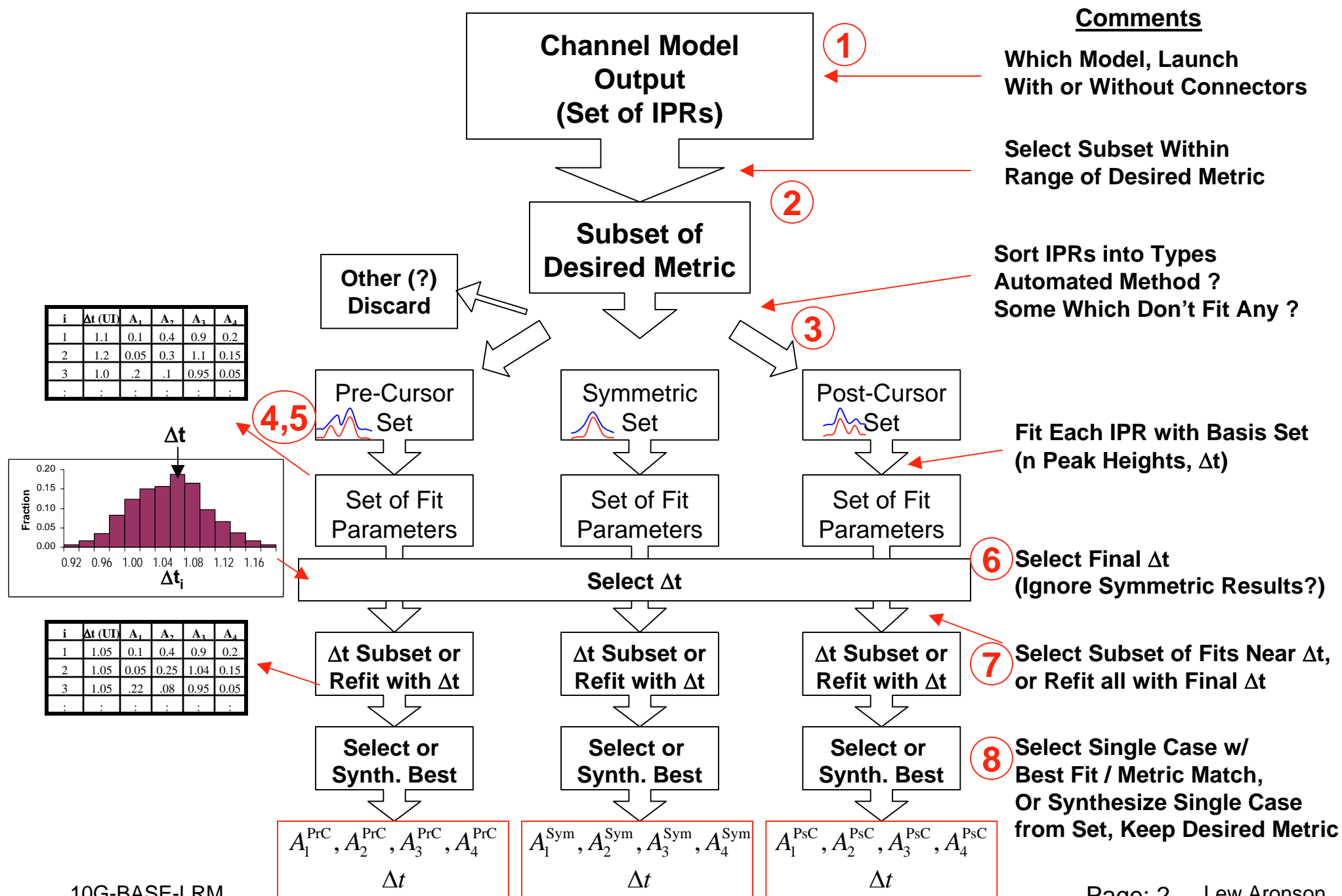

TP3 Stressed Sensitivity Test: Process for Determining ISI Impairments

Comments on Sorting into Categories (step 3) and beyond

Lew Aronson – Finisar

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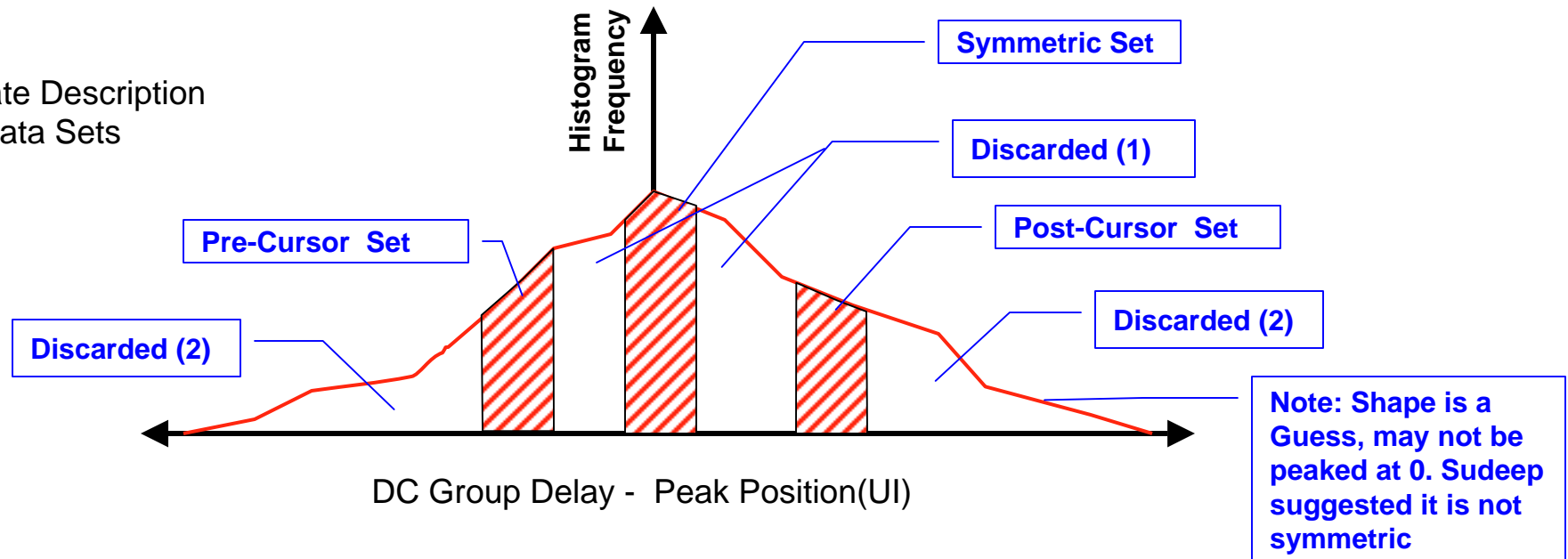
Selection Flow Chart



Bhoja 12-13 work

- Sudeep provided excellent first step of sorting models down into 3 categories.
- Metric of difference between main peak and DC group delay ('center of gravity') seems to work very well
- One question is why use particular criteria shown (e.g. $+20\% \pm 3\%$ of absolute delay).
- Propose following way of thinking of selection process. Histogram of results sorted by DC group delay - Peak :

Approximate Description
of Bhoja Data Sets

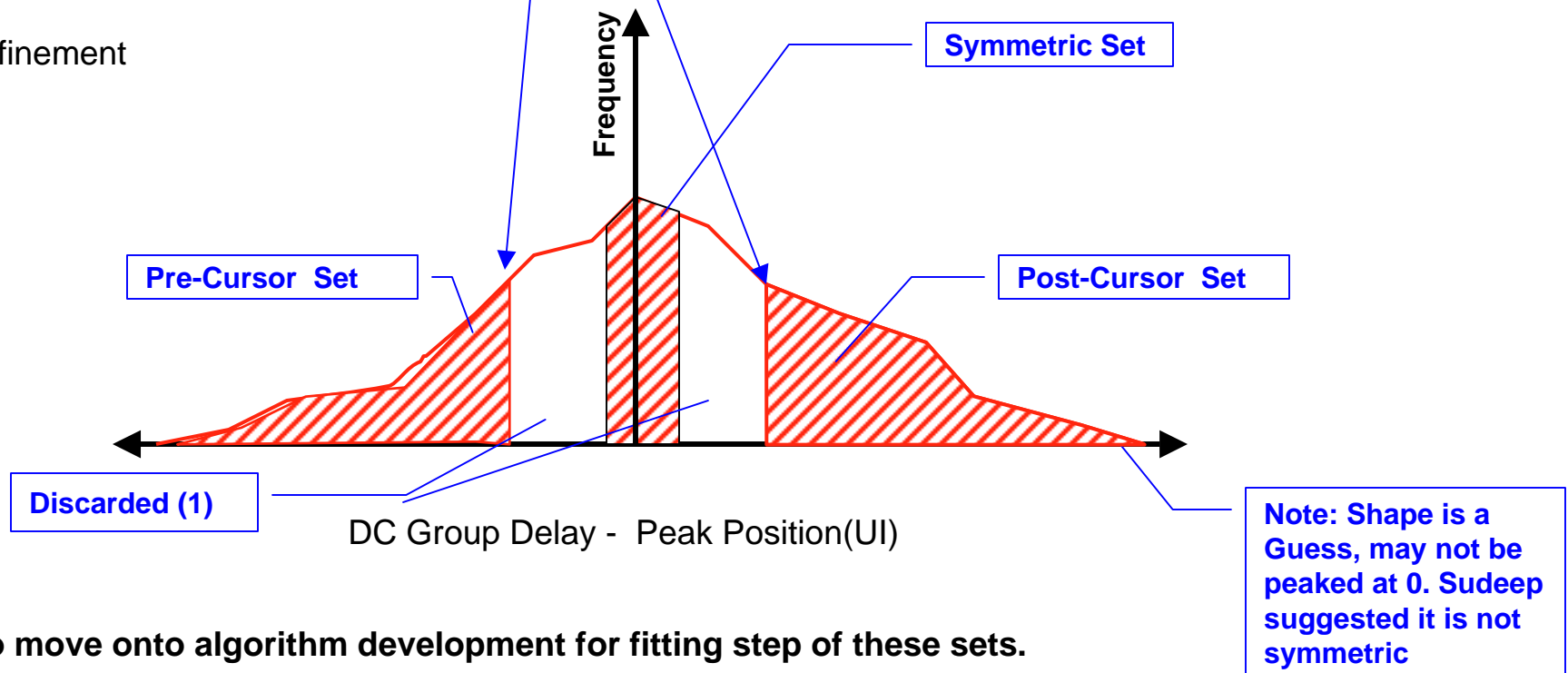


- Discarded IPRs between symmetric and pre and post cursor sets "Discarded (1)" probably not clearly in any bin.
 - Probably worth discarding.
- Discarded IPRs with larger differences "Discarded (2)" are probably worth keeping.
- It may be interesting to see the difference in shapes within subsets of larger DC – Peak differences, but perhaps is not important if we simply choose to retain them all

Suggested Way to Proceed

- Keep all IPRs larger than a certain DC – Peak Value, chosen to provide distinctly pre and post-cursor like IPRs
- If number of sets is unmanageably large, simply tighten the PIE-D metric window. Currently chosen as 4.5 ± 0.5 dB, go to ± 0.1 dB for example.

Suggested refinement



- Important to move onto algorithm development for fitting step of these sets.
- More difficult question will be by what criteria to make the final choice
 - Quality of fit to representing basis function
 - Degree of post / pre-cursoriness?