Spatial Patterning

$$x' = x - vt \quad \text{MF @ } x=0$$

speed of MF

$\Rightarrow$ we are in ref frame of furrow.
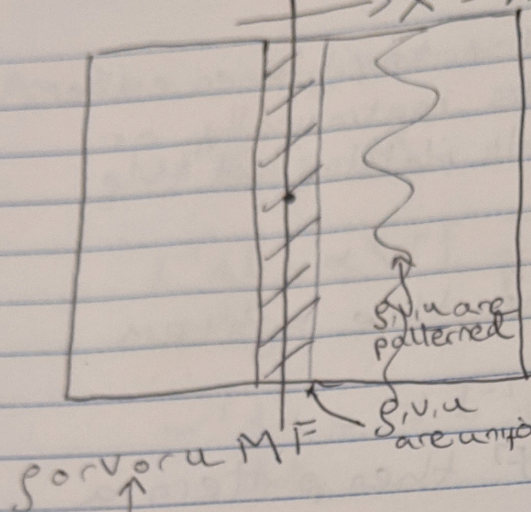
We have the following field measurement.

1) ρ, density
2) v, velocity
3) u, fate

ρ or v or u MF

ρ, v, u are uniform

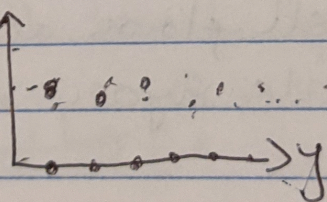si u are patterned

~~we will repeat also the~~
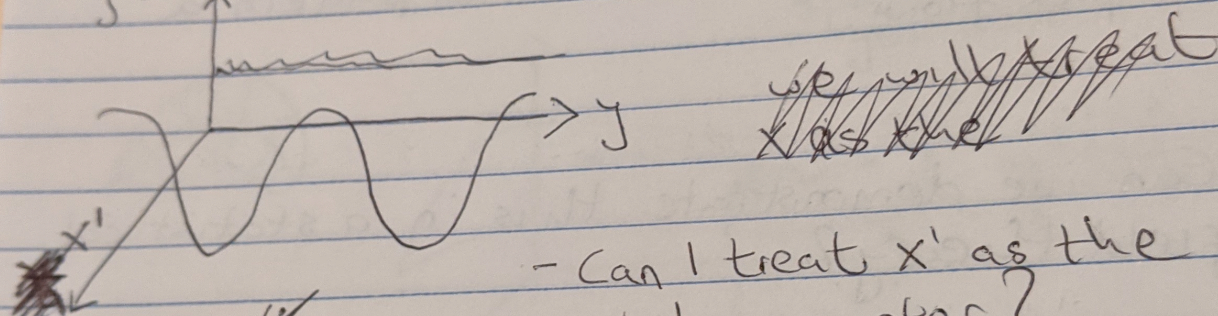
- Can I treat x' as the control parameter?
- Is the system invariant, statistically in $x' = x - vt$ ref. frame?

consider $\frac{}{}(y)/x'$

each time pt gives a different set of us and vs.

- Two ways to look at the data.
  1) PCA   2) Fourier

Option 1: PCA

@ each $x' \rightarrow$ PCA of $\{u(y)\} \rightarrow$ which pts. along y covary

- I expect that at $x' \sim 0$ you will have an evalue spectrum with no gap $\rightarrow$ at some x' I expect a gap to open up