- 1) Sampler + bandpass filter gets you alose.

 The time shift plays a role in achieving the inverted spectrum but it requires some finesse.
- 2) Yes. The center of mass is $\int \kappa f(\kappa) d\kappa$ which relates nicely to F(s).
- 3) It would be best to agree and disagree with Dr. T.

 Dr T. is partially correct but additional constraints on

 so and F(s) are needed to avoid potential ambisuities

 in determining the center of mass.