1. How do you solve directed flow?

2. $l_k$ distance on a tree, is embeddable in Effective Resistance.

3. Let $C$ be the covariance matrix of any distance in

$$\{l_2, l_1, l_2^2, Effective - Resistance\}.$$

   $C^k$ for $k < 1$ is a covariance matrix of the same distance. Why? (Here, Covariance = mean-center the points in $l_2^2$, then take dot products.)

4. Why does Matrix Chernoff for $L_G^\dagger$ give such terrible concentration for each effective resistance?

5. Can graphical spectral sketches preserve all pairs max flow?

6. Can graphical spectral sketches / spectral sparsifiers, preserve $q$-norm flow?