Cool things from JSM 2017

Charles Zheng

National Institute of Mental Health

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Inference without assumptions

- Larry Wasserman, "Inference without assumptions, Review and Current Progress"
- Conformal prediction by Vovk, Gammerman and Shafer (2006)
- Exact confidence and prediction intervals, *only* needing to assume i.i.d. data
- Application to *k*-means..

Using conformal prediction to choose k

- Wasserman's idea: build prediction set using k-means and data-splitting.
- Resulting prediction set is a union of spheres centered around the centroids.
- When spheres intersect, merge those clusters.

Does it work? I tried it out myself..