Straight Talks about Robust Methods

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Abstract:

Instead of presenting another research result, I wish to use this opportunity to initiate some discussions on the views and uses of modern robust statistical methods. They will reflect some of the questions and concerns that have been nagging me for years, such as

- 1. Do we tend to be too demanding when we evaluate a robust procedure?
- 2. Is computational complexity a major hurdle or is there something more serious?
- 3. Do asymptotic properties matter?
- 4. Is the breakdown point a really pessimistic measure of robustness?
- 5. Should we promote the use of robust methods in exploratory or confirmatory data analysis?
- 6. Are robust methods needed to handle huge data sets with many variables?

I may argument the discussions with my own consulting experience where awareness of robustness often plays a very positive role. Please join me in examining those issues with an open mind and maybe we will agree to disagree.

Please fill in this form and mail it together with your abstract.

My abstract fits best to topic number ... ("23 General".).

List of Topics:

- 1. Algorithms
- 2. Applications
- 3. Biostatistics
- 4. Computing and graphics
- 5. Data analysis
- 6. Data mining
- 7. Economics, finance
- 8. Efficiency and robustness
- 9. Functionals and bias
- 10. Fuzzy statistics
- 11. Geostatistics
- 12. Inference for robust methods, model testing
- 13. Location depth and regression depth
- 14. Multivariate methods
- 15. Neural networks
- 16. Rank-based methods
- 17. Regression quantiles, trimming
- 18. Robust covariance
- 19. Robust designs
- 20. Robust regression
- 21. Time series analysis
- 22. Wavelets
- 23. Other (please specify)