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Plots: Galaxy-dark matter offsets in galaxy clusters and groups of the Illustris simulation

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ABSTRACT

Key words: galaxy clusters, dark matter, something else

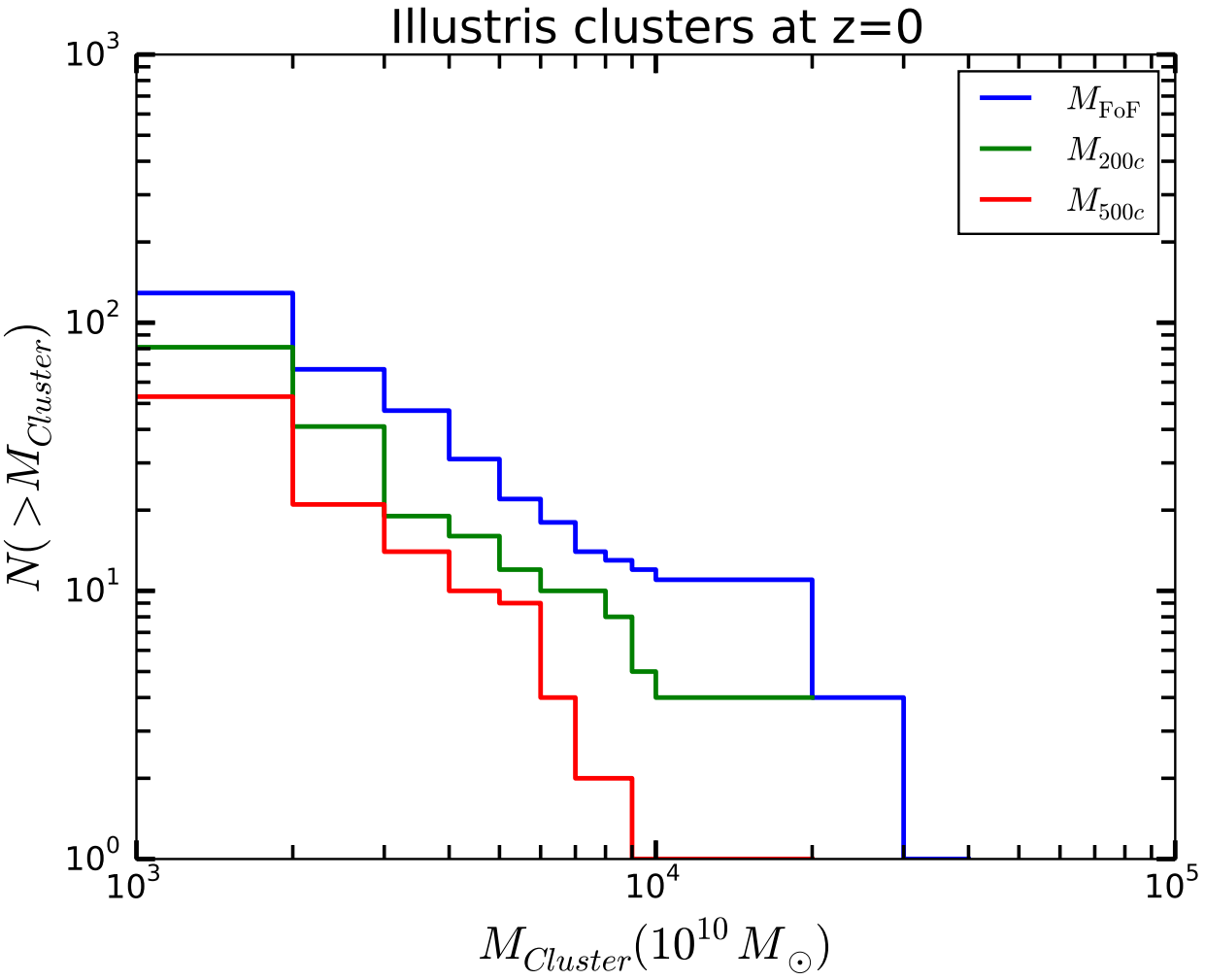

Figure 1.

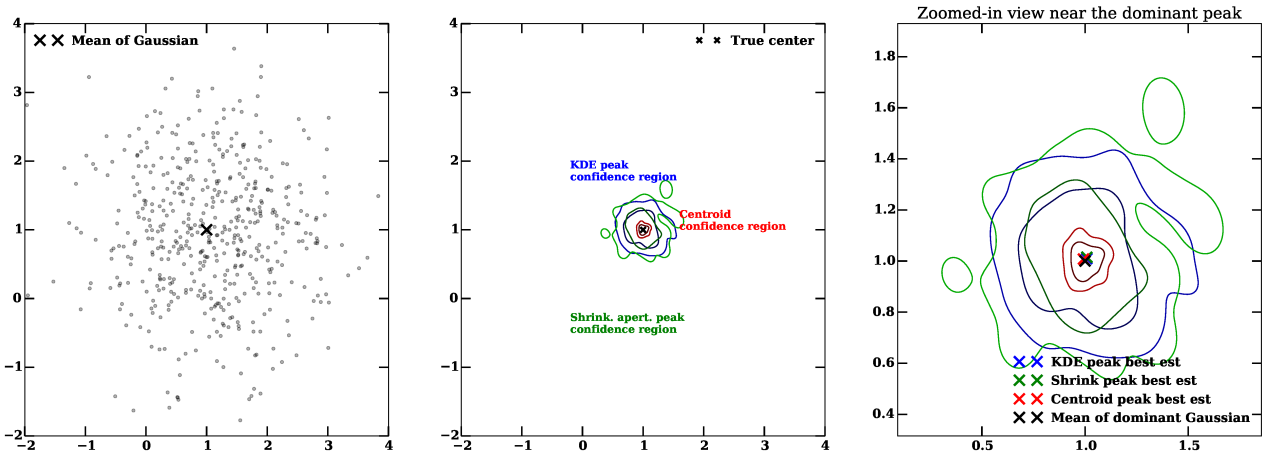

Figure 2. Comparison of the estimates given by different peak finding methods. **Leftmost plot:** One realization of drawing data from a Gaussian centered at (1, 1) with an identity matrix as the variance-covariance matrix. Grey data points (500 in total) were drawn In total 200 realizations of the Gaussian data were drawn. **Middle plot:** Each set of colored contours represents the 68% (inner contour) and the 95% confidence region of the best estimates of the peak location. The contours are computed from 100 realizations of the Gaussian mixtures data respectively. **Rightmost plot:** Zoomed-in view of the contours and best estimates (best est) from each method near the dominant peak.

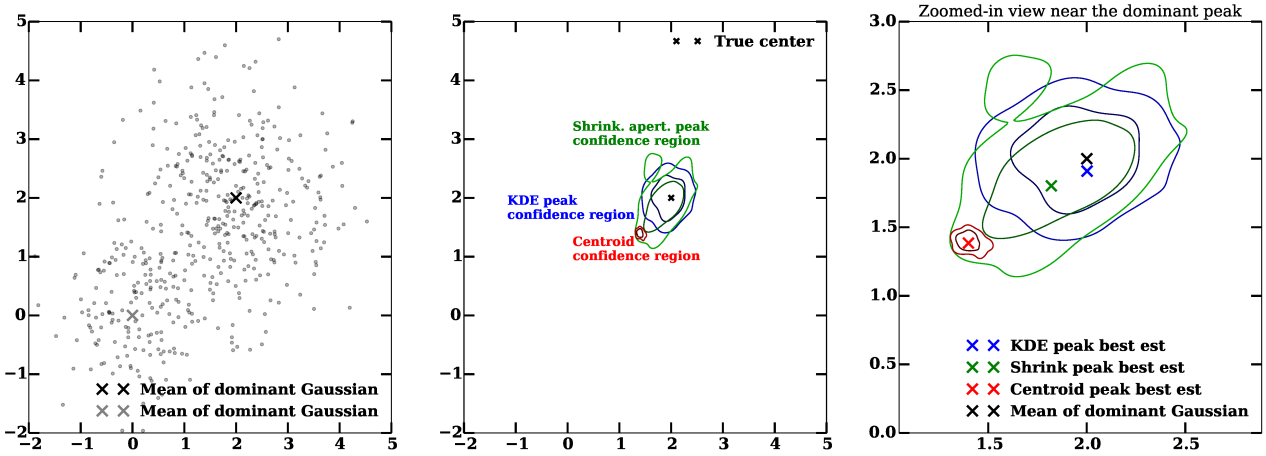

Figure 3. Comparison of the estimates given by different peak finding methods. **Leftmost plot:** One realization of drawing data from a Gaussian centered at (2, 2) with an identity matrix as the variance-covariance matrix and a second subdominant matrix at with mean at (0, 0) and a reduced variance-covariance matrix. Grey data points (500 in total) were drawn In total 200 realizations of the Gaussian data were drawn. **Middle plot:** Each set of colored contours represents the 68% (inner contour) and the 95% confidence region of the best estimates of the peak location. The contours are computed from 100 realizations of the Gaussian mixtures data respectively. **Rightmost plot:** Zoomed-in view of the contours and best estimates (best est) from each method near the dominant peak.

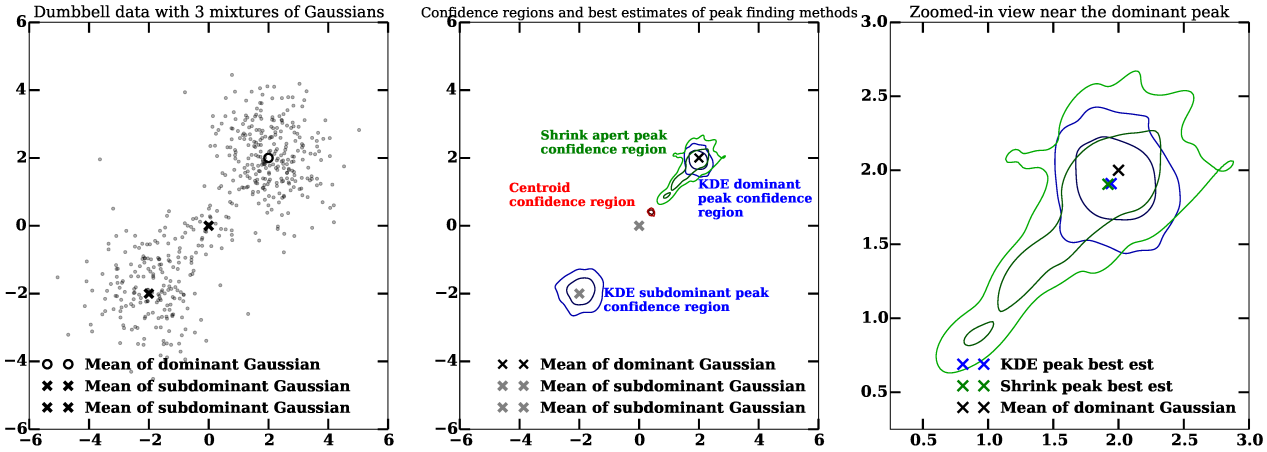

Figure 4. Comparison of the estimates given by different peak finding methods. **Leftmost plot:** One realization of drawing data from 3 Gaussian mixtures. Grey data points (500 in total) were drawn from three Gaussian mixtures with the mean locations of the Gaussians indicated by the black markers. In total 200 realizations of the Gaussian data were drawn. **Middle plot:** Each set of colored contours represents the 68% (inner contour) and the 95% confidence region of the best estimates of the peak location. The contours are computed from 100 realizations of the Gaussian mixtures data respectively. **Rightmost plot:** Zoomed-in view of the contours and best estimates (best est) from each method near the dominant peak.

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