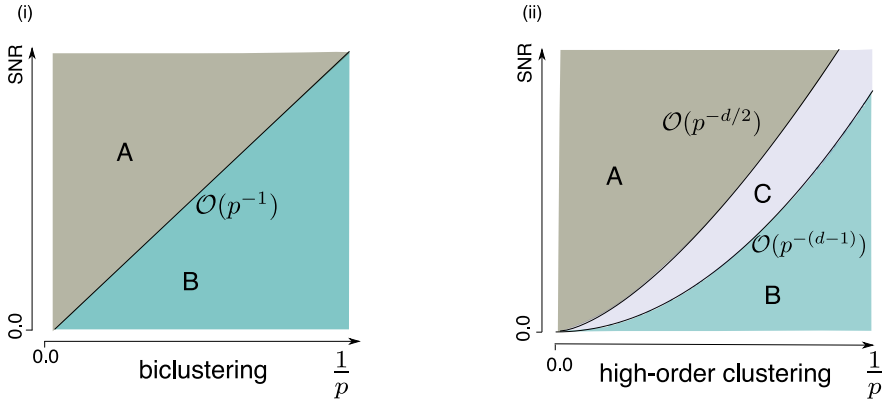

Figure 2: Statistical and computational properties for (i) biclustering and (ii) high-order clustering with an order-d (p, . . . , p)-dimensional tensor. The signal-to-noise ratio (SNR) is divided into three regions according to dif erent performance behaviors. Region (A) statistically and computationally easy, where the problem is solvable in polynomial time. Region (B): statistically hard, where no consistent estimator exists regardless of the computational budget. Region (C): statistically easy but computationally hard, where we conjecture that no polynomial algorithm exists for the problem. Note that the statistical-computational gap (region C) arises only for tensors of order 3 or greater.