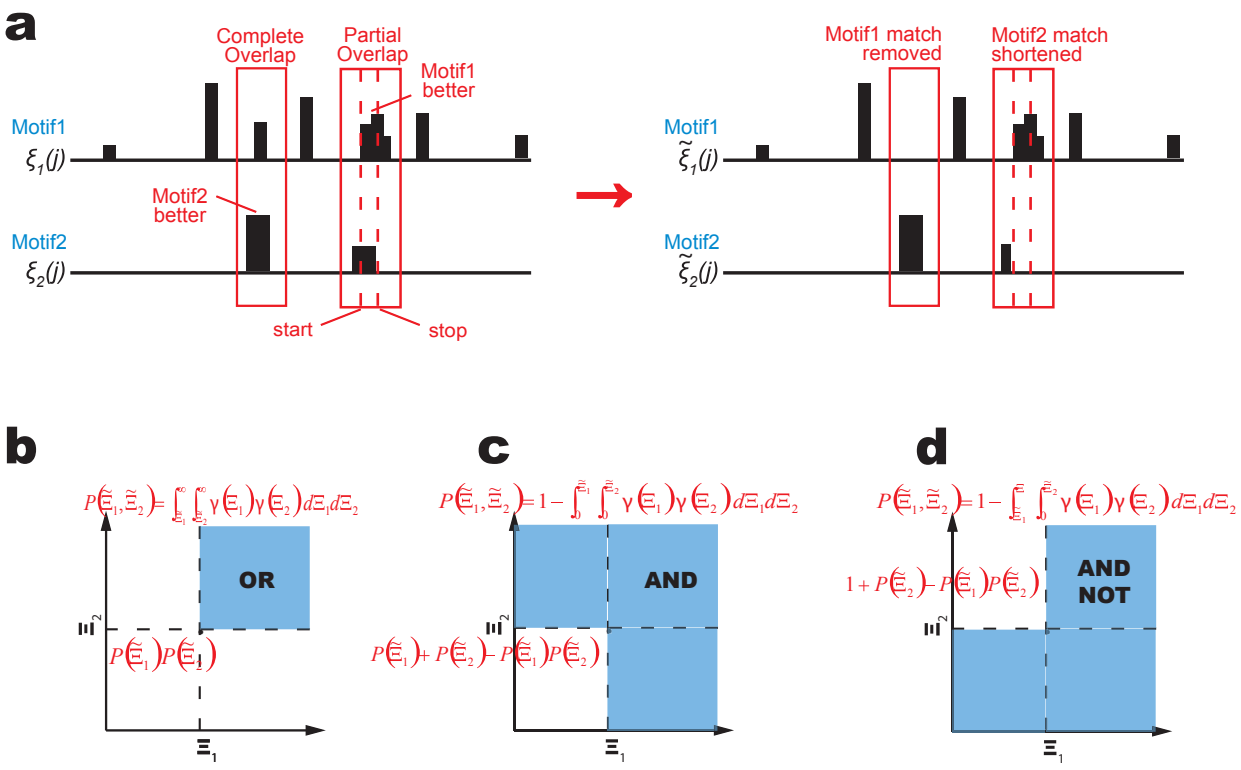
Supplementary Figure 3



Supplementary Figure 3: Schema of scoring scheme for PhylCRM, for case of multiple motifs. (**a**) For two potentially overlapping motifs with positional scores ξ_1 and ξ_2, a de-overlapping step is performed (see text) where $\xi_i(j) = 0$ if $\xi_i(j) \neq \max\{\xi_1(j), \xi_2(j)\}$, $i \in \{1,2\}$. This step prevents motif-matches from being double-counted. (**b**) A restrictively-defined tail for the joint distribution of window scores $P(\Xi_1,\Xi_2)$. Here, a window can receive a good score (i.e., low $P(\Xi_1,\Xi_2)$) if it is enriched for either of the motifs, and thus this tail can be interpreted as an OR. (**c**) A generously-defined tail for the joint distribution of window scores $P(\Xi_1,\Xi_2)$. Here, a window must be enriched for both motifs in order to score well, and thus this tail can be interpreted as an AND. (**d**) A tail that is analogous to an "AND NOT" Boolean combination. Here, a window must be enriched for motif 1, but not enriched for motif 2 in order to score highly (i.e., low $P(\Xi_1,\Xi_2)$).