Range queries

Report all line segments intersecting
a query range Q of constant complexity

$w =$ diameter of Q
$k_\varepsilon =$ number of segments at distance $< \varepsilon w$ from Q

Results:

- for fat triangulations:
  range queries in $O(\frac{1}{\varepsilon}(\log_B n) + scan(k_\varepsilon))$ I/O's
- for low-density line segments:
  (after refining the data structure in $O(sort(n))$ I/O's)
  same bound.