

Know:  $p, q, R$

$p = R_p$  maximizes  $f(p, n, R, q)$

$p, R \in \mathbb{N}, \quad q \in [0, 1]$

Find:  $n \in \mathbb{N}$

$|p| \leq n \leq R$

How: For each  $n \in \{1, 2, \dots, R\}$ :

$p_n = \text{PMLE}(n, R, q) \leftarrow \text{forward problem}$

$\varepsilon_n = |p_n - p|$

Return  $\begin{cases} n, \varepsilon_n, \text{ values s.t.} \\ m_n = \# p_n \text{ estimates,} \\ p_n \end{cases} \begin{cases} \varepsilon_n \text{ is minimal} \\ \text{or} \\ p_n \text{ is pair of estimates} \\ \text{flanking } p \end{cases}$