Sequential algorithm
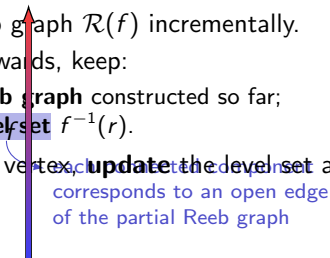Informal description

- Process the vertices of the mesh by **increasing** value of f.
- Construct the Reeb graph $\mathcal{R}(f)$ incrementally.
- While sweeping upwards, keep:
    - the **partial Reeb graph** constructed so far;
    - the current **level set** $f^{-1}(r)$.
- When processing a vertex, **update** the level set and the Reeb graph accordingly.

each connected component
corresponds to an open edge
of the partial Reeb graph

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