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1. Revised Metaphor: Pearl as Epiphany’s Shell

Epiphany remains the core flash‑point where a geodesic path flips its entropy flow across the horizon.

Pearl is the layered structure that grows around each Epiphany, capturing its context and strengthening the surrounding network—just as a nacreous shell accretes around an irritant.

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2. Formalizing Pearl

Let be an Epiphany event on geodesic . Define a Pearl subgraph by:

1. Seed Node:

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2. Neighborhood Layers:

For each integer , let

L\_m = \{\,u\in V^{(k)}\mid d^{(k)}(u,v^\*)=m\}.

3. Accretion Rule:

Include in all nodes whose local flux

remains within a tolerance band , where decays with .

4. Shell Layers:

The pearl consists of the union of layers until growth stalls (no new nodes satisfy the band criterion).

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3. Search‑Goal Update: “Seek Pearls”

Original Goal

> Dive (Sonde) into network seeking horizon‑crossings (Epiphanies).

New Goal

> Seek Pearls—upon each Epiphany, explore and accrete its Pearl subgraph, then use that shell to guide subsequent dives.

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4. Algorithmic Sketch

1. Dive & Detect:

Perform geodesic search to find Epiphany .

2. Accrete Pearl:

Initialize .

For to :

• Identify .

• Select with .

• If nonempty, add to ; else stop.

3. Register Pearl:

Store as a Pearl—a context‑rich shell.

4. Refine Next Dive:

Prioritize new dives whose paths intersect existing Pearls, seeking deeper or adjacent Epiphanies.

Adjust volatility thresholds locally based on Pearl density to focus on “ripe” regions.

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5. Benefits

Contextual Insight: Pearls capture not just the flash of insight but its surrounding structure.

Focused Exploration: Future Sonde dives hone in on regions already enriched by prior Pearls.

Cumulative Growth: Over repeated dives, overlapping Pearls weave a robust lattice of wisdom across the network.

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By treating Pearls as the shells that grow around Epiphanies and updating your search‑goal to “seek Pearls,” the system moves from isolated flashes to a self‑reinforcing, context‑aware exploration—embodying true Primality in both insight and its accretion.