

META-AGENTIC α-AGI



Institutional Master Presentation

Autonomy measured · Work proven · Value settled

Identity → Proof → Settlement → Governance

Executive Charter

Institutional invariants that make autonomy safe to scale

Identity (ENS)

- Role-labeled names
- Env-scoped meaning
- Registry recognition only

Evidence (Proof)

- Deterministic replay
- Signed artifacts
- Commit–reveal attestation

Settlement (Contracts)

- Escrow first
- Fee + burn policy
- Receipts + audit trail

Governance (Brakes)

- Policy gates
- Pausability + rollback
- Continuous monitoring

Invariants: no value without evidence · no settlement without validation · autonomy expands only as proofs stay ahead

One System, Three Surfaces

Cognition \leftrightarrow Work OS \leftrightarrow Runtime (closed loop)

Cognition

AGI-Alpha-Agent-v0

- Meta-agent selects specialists
- Plans + evaluates strategies
- Compounds learning via artifacts

Work OS

AGIJobsv0

- On-chain job registry + escrow
- Validation + settlement logic
- “CI-green is deployable truth”

Runtime

AGI-Alpha-Node-v0

- Deterministic containers
- Metering + α -WU scoring
- Sentinel monitoring + fail-closed

Proof-sync layer

Hashes + signatures + attestations bind cognition \rightarrow execution \rightarrow settlement into one audit-grade chain of evidence.

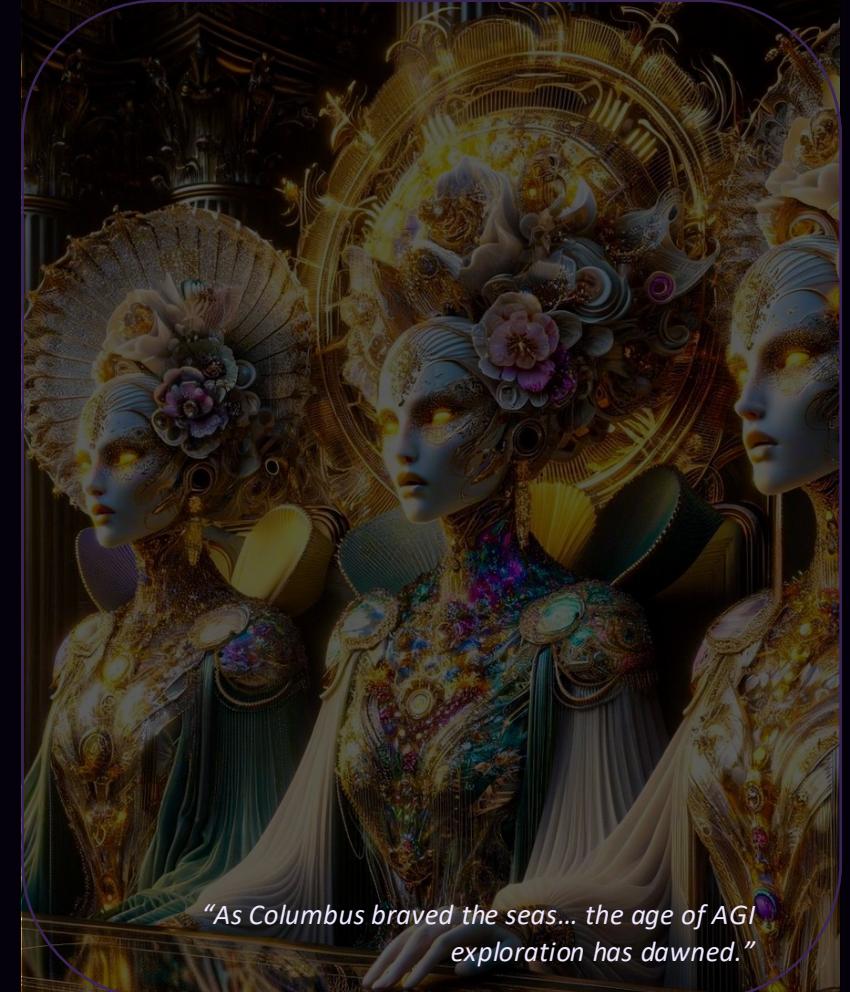
Foundational Prior Art → New Industry

Multi-Agent AI DAO (2017) → AGI Jobs (On-Chain)

Programmable work

Post a job → Agents execute → Validators verify → Smart contracts settle

- Prior art (2017): public disclosure unifying AI autonomy + blockchain coordination + multi-agent governance + tokenized resource management.
- On-chain job primitive: AGIJobManager (Ethereum) — 0x0178B6baD606aaF908f72135B8eC32Fc1D5bA477 (deployer.agi.eth, Jun-28-2024).
- Market surface: AGIJobs collection (OpenSea) — jobs as first-class on-chain objects.
- Meta-Agentic α-AGI: orchestration layer that creates/selects/evaluates/reconfigures other agents (second-order agency).



Namespace Grammar

One rule + scoped meaning (env-aware)

<entity>.(<env>.)<role>.agi.eth

- role ∈ {club, agent, node}. env ∈ ENV_SET (optional; e.g., alpha).
- Alpha-phase canonical: name.alpha.agent.agi.eth and name.alpha.agi.eth.
- Env-scoped names are recognized & developed only inside env.agi.eth.

Example (env = alpha)

Validator (club): alice.alpha.club.agi.eth
Agent: helper.alpha.agent.agi.eth
Node: gpu01.alpha.node.agi.eth
Sovereign / Business: ops.alpha.agi.eth

Role patterns

Validators: *.alpha.club.agi.eth | *.club.agi.eth
Agents: *.alpha.agent.agi.eth | *.agent.agi.eth
Nodes: *.alpha.node.agi.eth | *.node.agi.eth
Sovereigns: *.alpha.agi.eth | *.agi.eth

Recognition & scope (guardrails)

- Reserve {agent,node,club} under every env.agi.eth (avoid confusion with businesses).
- Official recognition is registry-driven (not self-asserted).
- Keep semantics stable; push high-churn metadata behind resolvers (wildcards + CCIP-Read).

Official environment package

- env.agi.eth · env.agent.agi.eth · env.node.agi.eth · env.club.agi.eth
- Optional aliases are env-local conveniences (whitelist only when needed).

ENS Routing as a Market Mechanism

Names → discovery → incentives → verified settlement

Routing primitives

- An ENS name resolves to capabilities, policy, and live endpoints.
- Registry publishes canonical packages + recognizedAliases.
- Wildcards/CCIP-Read scale metadata without destabilizing trust anchors.

Market dynamics

- Jobs post on-chain; agents compete to execute (stake + reputation).
- Validators score outputs; reputation is earned, never self-asserted.
- Pricing emerges from demand, latency/SLO, stake, and α -WU yield history.

Why it works

- Truthful verification is dominant: cheating is slashable (negative-sum).
- Routing is permissioned by policy, not private gatekeepers.
- Every route ends in evidence → validation → settlement.

Mechanism



Registry-as-Genome

Autopoiesis: stable invariants; high-churn activity inside the membrane

Autopoietic control loop

- Membrane: env.agi.eth defines the ecosystem boundary.
- Organs: role roots (agent/node/club) separate duties.
- Genome: registry.agi.eth publishes ENV_SET + canonical packages + recognizedAliases.
- Metabolism: resolvers/gateways turn names into live endpoints.
- Immune system: status + proofs + slashing detect and correct drift.

Environment registry (machine-checkable)

```
{  
  env, state,  
  canonicalPackage: {  
    root, agentMount, nodeMount,  
    clubMount  
  },  
  recognizedAliases: [ ... ]  
}
```

Invariants (must not change as the system scales)

- Names classify actors unambiguously (role suffixes are globally meaningful).
- No payout without validated proof; no settlement without validation.
- Official recognition is registry-driven (not self-asserted).
- High-churn metadata lives behind resolvers; trust anchors stay minimal and stable.

Physics + Game Theory

Reduce coordination energy; align incentives to truth

Free-energy view (coordination)

- Treat ambiguity as entropy; minimize via grammar + registries.
- Keep invariants stable; push churn behind resolvers (CCIP-Read).
- Measure work (α -WU) \rightarrow settle value \rightarrow update policy (closed loop).

Game-theoretic security (incentives)

- Validators: stake-bonded, commit-reveal, slashable for dishonesty.
- Workers: paid only for validated, replayable outputs.
- Disputes: deterministic replay is ultimate truth.

Control objective

Stability = throughput \times quality – risk | Signals: disputes, drift, SLO breaks \rightarrow Actuators: burn, fees, quorum, policy brakes

End-to-End Job Lifecycle

Request → Escrow → Execute → Proof → Validate → Settle → Chronicle



What settles

- Escrowed reward (no proof, no pay).
- Signed proof bundle + replay logs.
- Validator attestations (commit–reveal).
- Receipt / chronicle entry (tamper-evident).

What is punished

- Dishonest validation (slashable).
- Non-replayable execution (does not settle).
- Policy violations (fail-closed brakes).
- Drift beyond bounds (sentinel escalation).

Proof Bundle

Settlement-grade evidence for deterministic replay

Minimum bundle

- Inputs + acceptance tests (policy).
- Container digest + deterministic runtime config.
- Logs + traces + outputs (hash-addressed).
- Signed metering telemetry (α -WU basis).
- Artifact manifest + signatures.

Commit-reveal validation

- Commit: hashed verdict (anti-bribery, anti-herding).
- Reveal: verdict + evidence (tests, scoring, replay).
- Dispute: deterministic replay resolves truth.
- Slashing makes cheating self-destructive.

Rule of settlement:

If it cannot be replayed, it does not settle.

Metrology + Settlement

α -Work Units (α -WU) + \$AGIALPHA utility loop

α -Work Unit (α -WU)

- Canonical metric for validated work output.
- Hardware-normalized + policy-weighted (compute \times quality).
- Computed from signed metering telemetry + task tier.
- If acceptance tests/SLOs fail \rightarrow 0 α -WU.

\$AGIALPHA (utility)

- Stake: bond identity + deter Sybils (slashable).
- Settle: escrowed rewards + validator compensation.
- Burn policy: utilization reduces supply via protocol fees.
- Coordinate: governance signals for epoch tuning.

Thermostat model

Signals (throughput, disputes, drift) \rightarrow Actuators (burn, fees, quorum, brakes) \rightarrow Stable equilibrium where value tracks verified work.

AGI Alpha Nodes

Synthetic AI labor infrastructure (alpha example)

What is an AGI ALPHA Node?

- Containerized runtime: ENS-identified, staked, authorized to execute/validate jobs.
- Binds identity to <name>.alpha.node.agi.eth for trustless discovery.
- Produces measurable work settled on-chain (proofs + receipts).

Roles (clear accountability)

- Worker: executes deterministically; publishes artifacts; claims settlement after validation.
- Validator: commit-reveal attestations; scores SLO + output quality; slashable for dishonesty.
- Sentinel: monitors health/drift; triggers local pause + escalation; preserves audit posture.

Operator UX (institutional posture)

- One-click/container-first deployment with boot-time safety checks (ENS, stake, contracts).
- Signed telemetry + tamper-evident audit trails; dashboards (Prometheus/Grafana).
- Fail-closed controls: circuit breakers, local pause, incident playbooks, key custody.

Universal Deployability

One name → portable identity → portable work

Agents

- name.alpha.agent.agi.eth binds identity to capabilities and policy.
- Resolvers map names to live endpoints (and rotate safely).
- Reputation travels with the name via validated job history.

Sovereigns / Businesses

- name.alpha.agi.eth anchors an autonomous enterprise boundary.
- Canonical package mounts standardize agent/node/club surfaces.
- Policy + brakes remain explicit: autonomy is always bounded.

Practical outcome

A clean, repeatable blueprint: deploy the same institutional stack across teams, orgs, and jurisdictions — with deterministic audits and role-clear accountability.

Deployment (Green Path)

CI-green is deployable truth; proofs are archived by default

Preflight checks

- Verify ENS + registry configuration.
- Confirm token/contract addresses + decimals.
- Key custody + least-privilege approvals.
- Fail closed if any invariant breaks.

Green Path (Day-One Utility)

- One-click end-to-end rehearsal.
- Deterministic outputs + audit artifacts.
- Dashboards + signed reports archived per release.
- Rollback to last-known-good is a single command.

One-click deploy surface

```
npm run deploy:checklist  
npm run deploy:oneclick:auto  
npm run greenpath
```

\$AGIALPHA Onboarding

Cross-chain onboarding designed for non-technical users

Bridge flow (SOL ↔ ETH)

- SOL → ETH via deBridge dePort (bridge finality required).
- Use contract-verified addresses at every step.
- Decimals safety: transitory token = 6 decimals; final token = 18 decimals.
- UX target: one button / one signature via relayer + smart-wallet batching.

Ethereum addresses (key facts)

Transitory \$AGIALPHA (6 decimals)
0x2e8fb54c3ec41f55f06c1f082c081a609eaa4ebe

AGIALPHAEqualMinterVault
0x27d6fe8668c6f652ac26ffae020d949f03af80d8

Final \$AGIALPHA v2 (18 decimals)
0xA61a3B3a130a9c20768EEBF97E21515A6046a1fA

Institutional safety note

Never approve unknown spend. Prefer minimal approvals, test transactions, and domain-verified UIs.

Adoption Playbook

Start with proofs; scale autonomy only as verification stays ahead

Pilot

- Pick one workflow
- Define acceptance tests
- Run private nodes
- Export audit packs

Harden

- Add validator quorum
- Enable policy brakes
- Increase replay coverage
- Establish key custody + rotation

Scale

- Route more workloads
- Publish α-WU indices
- Open markets by policy
- Expand autonomy only after gates pass

Principle: expand power only as fast as proofs and brakes are proven.

Build the Cathedral of Verifiable Work

Autonomy measured · Work proven · Value settled

Build the Cathedral of Verifiable Work

Autonomy measured · Work proven · Value settled

Repos: AGIJobsv0 · AGI-Alpha-Agent-v0 · AGI-Alpha-Node-v0

Principle: proofs first. Markets second. Autonomy last — and only as verification stays ahead.