

# POLY MASTER White Paper

**Poly Master: An AI-based neural network-based automated copy trading and risk hedging protocol for prediction markets.**

## I. Market Background: The "Threshold" for Market Prediction

### 1.1 Predicting Market Explosions and "Dimensional Reduction Attacks"

With the maturity of Web3 infrastructure, decentralized prediction markets, spearheaded by Polymarket, have evolved into the world's most astute "truth oracles ." **They are not only arenas for speculation but also leading indicators of global political, economic, and technological trends. However, behind this market, worth tens of billions of dollars, lies an extremely unequal "information class system."**

### 1.2 Core Pain Points: The Three Fatal Flaws of Ordinary Investors

After in-depth on-chain tracking and user behavior research, Poly Master summarized the fundamental reasons that limit ordinary users' ability to profit:

- **Information Asymmetry Wall:** Top traders (Smart Money) often possess private think tanks, high-frequency data terminals, and millisecond-level monitoring of social media sentiment. By the time ordinary users learn of an event's outcome through the news, the odds on the Polymarket have typically already retraced 90%. **Ordinary people aren't making predictions; they're essentially "taking over" the profits of the elite.**
- **Execution Lag Blackhole:** Predicting market odds fluctuations exhibits highly non-linear characteristics. A sudden tweet can cause the odds of winning to surge from 10% to 80% in just 3 seconds. Manually placing orders involves cumbersome steps such as connecting wallets, adjusting gas, and confirming signatures. This generational gap in "manual vs. algorithm" means that ordinary users will never be able to capture the optimal entry price.
- **The Capital Volatility Trap:** Prediction markets are essentially binary options games (Yes/No), lacking the hedging tools of traditional financial markets. If a prediction fails, the principal faces the risk of being 100% wiped out. This "total loss risk" deters many risk-

averse, high-liquidity investors (middle-class investors), leading to a prolonged state of high-risk speculation in the market.

### 1.3 Solution: Poly Master's "Dimensional Reduction Evolution"

The birth of Poly Master marks the official entry of the prediction market into **the era of "AI agent warfare."** **We do not recommend that users learn complex odds hedging; instead, we directly provide users with an "Omni-Brain" AI engine.**

#### Core logic: Evolving from "human-to-human" to "AI-to-human"

Poly Master completely breaks down existing barriers by constructing an adaptive neural network deployed on Polygon edge nodes:

- 1. The "shadowing" of elite decision-making:** Through **Omni-Brain**, we have achieved 24/7 pixel-level cloning of the world's top 100 traders (all with historical win rates exceeding 72%). AI analyzes their portfolio rebalancing intentions in real time, transforming the private wisdom of the elite into collective benefits for protocol users.
- 2. Eliminating human "emotional friction":** The AI engine is free from fear and greed. With microsecond-level execution speed, it completes position opening or closing in the instant the odds change, smoothing out all profit losses caused by manual operations.
- 3. Reshaping the concept of principal protection:** We've broken the curse of "failed predictions mean zero returns." Through the algorithmic adjustment of **the PLM Insurance Vault**, Poly Master transforms the residual value of failed predictions into PLM ecosystem tokens with high appreciation potential. This means that when users participate in predictions, they effectively have a "principal protection contract," ensuring that high returns are no longer accompanied by high risks of destruction.

**Poly Master Manifesto:** We are not teaching you how to predict the future; we are using AI to ensure you are standing with people who have already foreseen the future.

## II. Core Technology: Omni-Brain AI Matrix (The Neural Core)

**Omni-Brain** is a multidimensional neural network system developed by Poly Master. It achieves a leap from "passive observation" to "active prediction" through real-time analysis of full-chain data and capture of asymmetric information.

### 2.1 Smart-Money Sentinel: Behavioral Biometrics and Whale Fingerprints

*The Smart-Money Sentinel* module is not simply an address monitoring tool; it employs a sophisticated **behavioral biometrics analysis algorithm**.

- **Address noise reduction and cleaning:** Real-time filtering of market makers, hedging accounts, and repeatedly generated addresses for fraudulently obtaining points on Polymarket.
- **Whale Fingerprint Authentication:** AI generates unique "trading fingerprints" for the top 100 traders across the entire chain based on their address's position-building habits, single investment size, and sensitivity to different themes (such as elections, Fed rate hikes, and sports).
- **Synchronous cloning logic:** Once a non-random directional operation is detected at a high-win-rate address, the Sentinel system will immediately issue a "high-priority synchronization instruction" to the execution layer to ensure that user funds enter the market at the optimal position.

## 2.2 Sentiment Pulse: NLP Semantic Analysis and "Information-Driven"

In prediction markets, the speed at which information spreads is money. *Sentiment Pulse* is a high-frequency data acquisition layer:

- **Unstructured data processing:** Utilizing advanced **LLM (Large Language Model)**, we continuously scrape breaking news from X (Twitter), Telegram channels, Discord communities, Bloomberg, and Reuters 24/7.
- **Weighted sentiment analysis:** AI assigns different weights to information sources based on their authority (e.g., official accounts vs. ordinary tweets). For example, when a key political figure posts a tweet, the NLP engine can identify the political bias within 300 milliseconds and predict the direction of odds shift before drastic fluctuations occur.
- **Early positioning:** During the "information vacuum" before major rulings or official match results are announced, AI can analyze subtle shifts in market sentiment and lock in low-priced assets that have not yet been noticed by the public 1.5s to 3s in advance.

## 2.3 Adaptive Execution: Millisecond-level Adaptive Execution Protocol

Execution is key to determining the profit ceiling. The *Adaptive Execution* module solves the "friction" of on-chain operations:

- **MEV Protection and Privacy Transactions:** The protocol sends transactions through private relay nodes, bypassing the public Mempool and preventing Sandwich Bots from preempting them.
- **Dynamic slippage management:** AI calculates the depth of the current order book in real time and automatically splits orders for batch execution, ensuring that the average transaction price of users during the copy trading process is kept within **0.1% of the entry price of top traders**.

- **24/7 Risk Circuit Breaker:** When an extremely unreasonable odds inversion (Flash Crash) is detected for a prediction topic, the AI will instantly activate the circuit breaker mechanism to protect users' principal from the impact of a systemic collapse.

## 2.4 Self-Evolving Learning Model

Omni-Brain possesses self-evolving properties. After each copy trade is completed, the system automatically compares the actual result with the predictive model and automatically adjusts the algorithm weights through **reinforcement learning** . This means that Poly Master's copy trading accuracy will continuously improve as market data accumulates.

## III. Protocol Ecosystem: Multi-dimensional Execution Strategies and Adaptive Risk Hedging Mechanisms

The Poly Master protocol not only constructs a sophisticated path to predicting market alpha returns, but also provides participants with a highly resilient capital environment through its unique **Dynamic Asset Protection Layer** .

### 3.1 Alpha Copy: A policy execution terminal based on AI neuron weights

*Alpha Copy* module, through a highly integrated dashboard, allows protocol users to access diverse execution strategies, selected by **Omni-Brain AI** , **in real time based on their risk preferences** . This is not simply blind following, but rather "shadow execution" based on on-chain weights.

- **Core hierarchical system:**
  - **The Delta-Neutral strategy** focuses on macroeconomic prediction events with high consensus and low volatility, using AI to capture deterministic signals from addresses with extremely high win rates, and pursuing long-term compound returns on assets.
  - **The Gamma-Growth strategy** targets market opportunities with high asymmetric returns. It combines AI with an NLP-based sentiment analysis engine to help users gain a competitive edge when market perceptions are biased.
  - **Theta-Arbitrage:** Utilizes the odds wear-off in the market at different time windows to execute high-frequency and small positive expectation operations.

### 3.2 PLM Insurance Vault: An Advanced Risk Asset Conversion Protocol

This is the cornerstone of the Poly Master protocol's stability. We introduced a "dual-track principal protection model" designed to address the inherent capital drawdown risk in forecasting markets.

#### A. Mechanism Description: Risk Premium Compensation Algorithm

To optimize users' capital efficiency, the protocol establishes **an Insurance Vault**. When the execution terminal (AI Bot) faces unexpected outcomes (i.e., position losses) in a specific predicted event, the protocol will automatically trigger an "asset swap procedure".

## B. Logical Evolution: From "Absolute Loss" to "Asset Rebalancing"

- **Real-time profit and loss capture:** Monitor the settlement status of all active positions in the contract 24/7.
- **Equivalent value mapping:** If a single settlement results in a drawdown, the system will use the U base value at the moment of settlement as a benchmark to accurately calculate the difference in the damaged position.
- **PLM Automated Hedging Injection:** The algorithm automatically allocates an equivalent value of **PLM** governance tokens from the reserve pool to user accounts. This process is not a simple compensation, but a "dynamic swap between liquidity risk and ecosystem growth warrants."

### 3.3 Narrative Depth: Value Recovery and Capital Sustainability

In Poly Master's philosophy, every fluctuation in capital should be given the opportunity to grow again.

- **Flexible asset restructuring:** By converting the "one-way loss" of the prediction market into "holding positions" of Token PLM, the protocol essentially creates a "soft landing" mechanism for users. Users no longer face the risk of losing all their capital, but instead convert some of their risky assets into ecosystem benefits with deflationary characteristics.
- **Ensuring USDT-based value anchoring:** The brilliance of this mechanism lies in its use of tokenization to anchor users' underlying purchasing power. During periods of market volatility, \$PLM, as the protocol's core asset, possesses a strong expectation of value reversion through the "profit buyback and burn mechanism" described in Chapter 4, thus achieving substantial protection of users' initial capital on a macro scale.
- **Reshaping the psychological safety margin:** Through this "non-linear hedging solution," Poly Master significantly reduces the anxiety associated with external funds entering the prediction market. Users are no longer participating in a high-risk gamble, but rather in a "structured financial participation" **safeguarded by AI and hedging by algorithms**.

## IV. Economic Model: \$PLM Token Value Peg (Tokenomics & Value Capture)

**\$PLM (Poly Master Token)** is the core governance asset and utility token within the protocol ecosystem. Its design logic is based on a dual spiral of "deflationary drive" **and** "value return," aiming to accurately transmit the protocol's growth dividends to every token holder.

## 4.1 Core Driving Force: Tiered Admission and Execution Weighting (Stake-to-Execute)

In the Poly Master protocol, \$PLM is not just a token, but also a "quota certificate" for users to obtain **Omni-Brain AI** computing resources.

- **Dynamic Following Limit:** The protocol introduces a "staking-yield correlation" model. The amount of PLM tokens a user stakes directly determines the amount of funds they can mobilize in the **Alpha Copy** module. The higher the staked amount, the higher the maximum USDT position a user can allocate to the AI-tracked top traders.
- **Execution Priority:** When faced with odds fluctuations within a very short time window, the system will prioritize instructions based on the staking weight of Token PLM. Instructions from highly staked accounts will be executed via **the Adaptive Execution** protocol, ensuring priority entry before odds drift.

## 4.2 Value Cycle: Buyback and Destruction of 20% Performance Fee

To establish a long-term, stable value foundation, the protocol has designed a strict "profit buyback mechanism" that deeply links the value of Token PLM to the profitability of AI:

- **Performance Fee:** When AI assists users in generating net profits, the agreement will extract 20% of the profits as an ecosystem maintenance fee.
- **On-chain automated burn: 80% of the fee (i.e. 16% of the total profit)** will be automatically repurchased and **permanently burned on the secondary market via smart contracts** .
- **Narrative implications:** This creates a purely **positive feedback loop** —the more accurate the AI predictions and the more profitable the copycat users, the stronger the buying pressure on Token PLM in the secondary market, and the scarcer the total supply of the token. This design positions Token PLM as a deflationary asset with "productivity attributes."

## 4.3 Protocol Governance: Computing Power Allocation and Domain Expansion (DAO Governance)

Holding the PLM token means having the ultimate say in the evolution of **Poly Master AI** :

- **AI tracking decision-making:** The prediction market covers a wide range of areas. \$PLM holders can vote through DAO proposals to decide which vertical areas (such as: electoral politics, emerging crypto assets, sports odds, or macroeconomic data) will be prioritized for deep learning and tracking in the next phase of AI development.
- **Insurance Vault Strategy Adjustment:** **The community can vote together to adjust the hedging ratio and token release rate of Insurance Vault** based on market fluctuations , ensuring the robustness of the protocol across different periods.

## 4.4 Scarcity Matrix

价值维度	逻辑链路	最终效应
刚性需求	获取 AI 高级功能、提升跟单额度、优化执行速度。	锁仓量 (TVL) 持续上升
通缩回购	AI 盈利 → 市场回购 → 永久销毁。	循环供应量持续减少
保险锚定	作为 Insurance Vault 的补偿媒介，建立广泛的使用场景。	筹码换手与价值共识增强

Click the image to view the sheet.

## V. Development Roadmap: The Evolution of Poly Master

Poly Master's vision is to build a cross-chain, adaptive, and fully automated AI prediction hub. Our roadmap is divided into four key phases, aiming to evolve from a single-chain tool into a Web3-wide AI decision-making infrastructure.

### Phase 1: Neuronal Awakening (Q1 2026) – Technological Foundation and Mobility Initiation

- **Omni-Brain Core Internal Testing:** Initiated internal testing of the AI prediction engine based on adaptive neural networks, completed deep learning backtesting on historical data on the Polygon chain, and optimized the recognition accuracy of Smart-Money Sentinel.
- **Seed round liquidity deployment:** Launch the initial liquidity pool (Genesis Liquidity Pool) of Token PLM to establish basic reserves for the protocol's **Insurance Vault**.
- **Whitelist Node Recruitment:** "AI Priority Experience Nodes" are open to early supporters to collect core interaction data to optimize execution algorithms.

### Phase 2: Ecosystem Reach (Q2 2026) – Terminal Interaction and Transparent Dashboard

- **Telegram AI Interactive Terminal:** Releases the lightweight **Poly Master Bot**. Users can manage asset custody, switch strategies, and check profits and losses via instant messaging software without complicated operations, realizing an "AI trader in your pocket."
- **Alpha Dashboard 1.0 launched:** Real-time public analysis of the dynamic behavior of Polymarket's top 100 traders and its AI scoring system. Through data transparency, it establishes an industry-leading standard for tracking "smart money."
- **Sentinel system upgrade:** Introducing the Sentiment Pulse sentiment analysis engine to achieve second-level semantic analysis of mainstream global news sources.

## Phase 3: Order Fission (Q3 2026) – Global Partners and Community Co-governance

- **Global Community Partner Program:** Launching the "Distributed Growth Protocol," which uses AI recommendation algorithms to accurately match community leaders (KOLs) with active users, and achieves exponential growth in user base through a decentralized incentive mechanism.
- **PLM Staking Tier System:** The Token PLM tiered access system has been officially launched, which enhances the value of locked tokens through higher-level permissions (such as lower latency and higher limits).
- **DAO governance prototype:** The first round of community voting will be launched, with Token PLM holders deciding on the prediction categories that AI will focus on capturing next and adjusting the insurance warehouse parameters.

## Phase 4: Full Chain Sovereignty (Q4 2026) – The 2.0 Era and Cross-Chain Expansion

- **Poly Master 2.0 Protocol Upgrade:** The architecture has been fully upgraded to support parallel execution of multiple strategies and more complex risk hedging models.
- **Full-chain and full-volume coverage:** Utilizing cross-chain communication protocols (such as LayerZero/Wormhole), AI prediction capabilities are extended to mainstream prediction markets such as **Base**, **Solana**, and **Ethereum L2**, enabling unified scheduling of liquidity across the entire network.
- **AI computing power sharing interface:** an open protocol API that allows third-party DApps to access Poly Master's AI prediction data stream, building a broader AI + Prediction ecosystem.