

1. What is Clarus?

Clarus is a **meta-structural framework** for evaluating long-horizon stability in decision-making systems.

It measures how a trajectory behaves under perturbation and whether its structure reconverges or collapses over time.

Think of it as a lens for detecting **deep coherence** that is invisible to local or static evaluation.

2. What problem does it solve?

Modern systems — whether neural networks, symbolic search, or hybrid agents — tend to:

- over-focus on local signals
- prune away globally stable trajectories
- fail to detect long-horizon coherence
- miss decisions that look unstable early but stabilise later (e.g., Move 37)

Clarus provides a stability measure that recovers these hidden trajectories.

3. What is κ (kappa)?

κ is a **continuous stability signal** that evaluates how a decision, configuration, or state responds to perturbations over a finite horizon.

It captures:

- drift
- reconvergence
- recovery margins
- basin entry
- long-horizon coherence

κ is **not a heuristic** and not a static score.

It is a **trajectory-level measurement**.

4. Is κ a Lyapunov exponent?

No.

It generalizes the *concept* of finite-horizon stability but is not defined by any single Lyapunov form.

It is designed for:

- finite amplitudes
- finite horizons
- non-linear landscapes
- high-dimensional decision spaces

It is inspired by dynamical principles but **not reducible** to classical stability analysis.

5. How is κ computed?

This is proprietary.

The public description is:

“ κ measures the contraction or expansion of perturbations across a trajectory.”

The computational pathway, transformations, perturbation protocols, sampling rules, smoothing functions, and basin-detection logic are **not disclosed**.

6. What is the C64 coherence engine?

C64 is the **abstract computational regime** underlying Clarus.

It operates by:

- continuous settling
- convergence toward equilibrium
- evaluation of stability over time

It is a **conceptual architecture**, not an implementation disclosed in this paper.

Nothing published enables reconstructing C64.

7. Is C64 a real processor?

Not yet.

It is a **fabricable pathway**, but no hardware-level schematics, micro-dynamics, coupling equations, or materials constraints are shared.

Research teams can only understand the **principle**, not the **design**.

8. How does Clarus relate to AlphaGo’s Move 37?

Clarus reframes Move 37 as:

“A high- κ trajectory that appeared locally irregular but globally coherent.”

Human heuristics prune such trajectories.

Clarus identifies them.

This provides a general framework for “superhuman moves” across domains.

9. Is Clarus domain-specific?

No.

It is domain-agnostic because stability is a **meta-structural property**.

It applies to:

- strategic games
- molecular design
- protein folding
- long-horizon reasoning
- generative modelling
- multi-stage planning
- systems biology
- optimization tasks

Each domain reveals different *expressions* of stability, but κ measures the same underlying phenomenon.

10. Does Clarus replace deep learning?

No.

It complements it.

Deep learning provides:

- representation learning
- prediction
- heuristics
- value functions

Clarus provides:

- stability
- long-range coherence
- structured reasoning
- perturbation-level insight

Together they offer more than either can alone.

11. How does Clarus affect model safety?

It exposes:

- hidden failure basins
- drift-prone decision regions
- instabilities that appear safe locally
- sudden transitions triggered by small perturbations

This allows models to be:

- more robust
- more predictable
- more stable under noise
- more aligned with human goals

This is especially important as systems scale.

12. Does Clarus reveal creativity?

Yes.

It shows that creativity arises when a system discovers:

“Regions where structure reconverges despite local irregularity.”

Human intuition treats these zones as anomalies.

Clarus treats them as **computable patterns**.

13. Is Clarus an algorithm?

Clarus is a **framework**, not a specific algorithm.

Multiple computational pathways can implement Clarus principles.

The proprietary pathway is **not disclosed**.

14. What can be shared publicly, and what cannot?

SAFE TO SHARE

- conceptual framework
- definitions
- narrative explanation
- stability intuition
- high-level math
- philosophical insight

NOT SAFE TO SHARE

- perturbation protocols
- κ estimation algorithms
- energy-surface construction
- basin-detection logic
- coupling matrix assembly
- C64 micro-dynamics
- tile architecture
- threshold/smoothing functions
- substrate physics

The current paper respects these boundaries.

15. What is the future trajectory?

Clarus suggests the emergence of a third computational regime:

1. digital switching
2. statistical deep learning
3. **stability-based compute**

Clarus is the conceptual doorway to this third regime.

16. What does this mean for labs like DeepMind?

Clarus provides:

- a formal account of “superhuman” moves
- a unifying stability framework
- a new class of metrics
- a path to more stable, interpretable intelligence
- a bridge between cognitive science and compute
- a route toward equilibrium-based hardware

Nothing in the paper allows replication.
Everything in it enables understanding.