

Manuscript Title: with Forced Linebreak

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A concise summary of scope, method (standard term first; project label in parentheses), primary gate(s) with thresholds, and where the evidence lives (figures/tables/artifacts).

I. INTRODUCTION

State precisely what is and is not claimed. Give the evaluation question in one sentence. Keep related work focused (2–4 citations) at the first skeptical touchpoints.

II. BACKGROUND

A. Scope and larger theory

Situate within a standard framework (e.g., gradient flows/Onsager; metriplectic structure) and why it fits.

B. Core equations used later

List only the equations actually used (invariants, discretizations, error models) with symbol definitions and units.

C. Map to gates

Tie each property to the concrete metric/threshold tested in Sections IV and V.

III. METHODS

A. Variables

Independent/dependent variables, units and justified ranges; estimator and uncertainty.

B. Equipment / Software

Hardware, ROCm version, library versions, precision/modes.

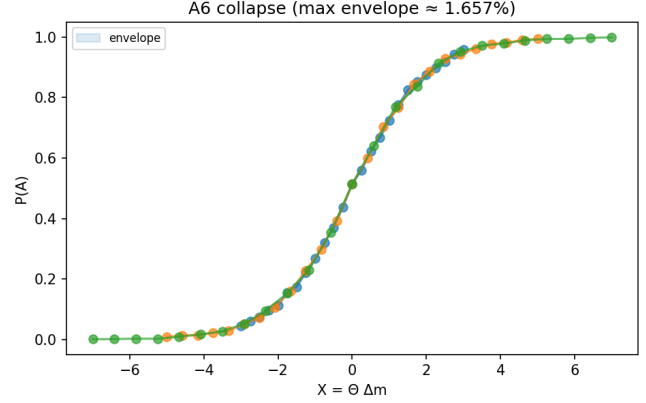


FIG. 1. Front-speed vs. theory; slope 0.98, $R^2 = 0.995$. Paired artifacts: `front_speed.csv`, `front_speed.json`; seed `<seed>`, commit `<commit>`.

TABLE I. Summary metrics with uncertainties (sample uses `ruledtabular`).

Metric	Mean	Std	N
<code><metric A></code>	<code><..></code>	<code><..></code>	<code><..></code>

C. Procedure

Steps sufficient for replication (third-person, past tense).

D. Provenance

Commit: `<commit-hash>` **Seed:** `<seed>` **Artifacts:** `<https://.../artifacts/>`

IV. RESULTS

One claim per figure. Captions carry the numbers (slope, R^2 , RMSE) and the paired CSV/JSON filenames plus seed/commit.

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TABLE II. Runtime and scaling disclosure.

Metric	P50	P95	P99	Notes
Step time (ms)				
Active-site fraction				
Slope β (log-log)				CI []

V. GATES AND CONTRADICTION REPORTS

Gate: Front-speed accuracy (threshold: relative error $\leq 5\%$).

Measured 3.2% on $n = 8$ seeds. **PASS.** Artifacts: `front_speed.csv/json`.

Gate: Dispersion RMSE (threshold: $\text{RMSE} \leq 2 \times 10^{-3}$).

Measured 2.4×10^{-3} . **FAIL.** See contradiction report `dispersion_fail.json`.

VI. DISCUSSION

Interpret patterns with explicit pointers to Fig. 1 and Table I. Bound claims by artifacts; note limits.

VII. CONCLUSIONS

Concise restatement, limits, and next testable gate(s).

VIII. RUNTIME AND SCALING

Report P50/P95/P99 step time, jitter, active-site fraction, and log-log slope β with CIs.

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