DBM-COT ITEM #243 - Roadmap 2026 (Phase I): DOI Release, Sequence CCC Deployment, Time-Series IR Pipelines, and ACLM Follow-up

Conversation: 降服万爪龙算法三大落地应用

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DBM-COT ITEM #243 (EN) Roadmap 2026 (Phase I): DOI Release, Sequence CCC Deployment, Time-Series IR Pipelines, and ACLM Follow-up

Item ID: 241
Type: Roadmap / Engineering Plan
Status: Active
Scope: Short-term (next phase) execution plan for DBM-COT Principle: Clear contracts, explicit stop-rules, verifiable deliverables

A. DBM-COT DOI Open Release (Publication Track)

Category	Specification
Contract (Input)	DBM-COT repository with ITEMs ≥ #240 and ≥ 2 runnable demos
Contract (Output)	Zenodo DOI (versioned), GitHub Release (tag vX.Y), CITATION.cff
Key Deliverables	README (positioning + quick start), ITEM Index, Roadmap
Stop-Rule	A new reader can, within 10 minutes, understand DBM, run 1 demo, and know how to cite
Acceptance Criteria	DOI resolves correctly; release is reproducible from clean environment

Category	Specification
Primary Risk	Repository scale overwhelms first-time readers
Fallback Strategy	Freeze a *Slim Entry Pack* (3 ITEMs + 1 demo + 1 architecture figure)
Evolution Path	Future DOI releases add ITEMs incrementally without breaking citations

B. Sequence CCC Deployment (Algorithmic Backbone)

Category	Specification
Contract (Input)	ITEM #234 (Two-Ways CCC), ITEM #240 (Sequence CCC Kernel)
Contract (Output)	Drop-in Sequence CCC implementation aligned with DBM codebase
Key Deliverables	Kernel, Two-Ways orchestrator, DemoMain, JUnit4 tests
Stop-Rule	Budget enforced; Two-Ways consistency; signature-dedup stability
Acceptance Criteria	Multiple runs yield identical CCC fragments, scores, and ordering
Primary Risk	Over-optimizing long-tail CCC cases too early
Fallback Strategy	Retain MVP kernel; prioritize structural correctness over completeness
Evolution Path	Replace MVP miner with beam-based CCC, advanced stop-rules (S1/S2/S3)

C. Two Time-Series IR Pipelines (Application Track)

Category	Specification
Contract (Input)	Existing IR designs (numeric IR; non-numeric/causal IR ITEMs)
Contract (Output)	Two runnable IR pipelines with shared evidence/stop infrastructure
Key Deliverables	Demo pipelines, Evidence output, JUnit4 (budget, stability, invariants)
Stop-Rule	Each pipeline has ≥ 1 demo and ≥ 3 unit tests

Category	Specification
Acceptance Criteria	IR results are explainable, budgetbounded, and reproducible
Primary Risk	Excessive abstraction prevents runnable pipelines
Fallback Strategy	Reduce feature space; preserve minimal explainable IR
Evolution Path	Share Stop-Rule/Evidence structures with CCC and ACLM stacks

D. ACLM Follow-up (Platform Integration Track)

Category	Specification
Contract (Input)	ACLM SOS chains, Calling Graph, Sequence CCC kernel
Contract (Output)	Highway-aware Calling Graph prototype
Key Deliverables	CCC-based distance, highway extractor, demo
Stop-Rule	Highway paths are observable and influence resource allocation
Acceptance Criteria	Recurrent trunk paths detected; oscillation reduced; explanations clear
Primary Risk	Premature full-scale ACLM integration
Fallback Strategy	Limit scope to CCC→path frequency statistics
Evolution Path	Gradual fusion with differential trees, budgeting, and strategy synthesis

Overall Roadmap Statement

This roadmap marks a transition from conceptual consolidation to controlled execution. The DBM architecture is now sufficiently mature to support parallel progress across publication, algorithmic backbone, application pipelines, and platform integration—under explicit stop-rules and verifiable contracts.

DBM-COT ITEM #243（中文）路线图 2026（第一阶段）：DOI 开源、Sequence CCC 落地、时间序列 IR 推进与 ACLM 跟进

ITEM 编号：241

类型：Roadmap / 工程执行计划

状态：Active

范围：DBM-COT 近期阶段性推进路线

原则：Contract 明确、Stop-Rule 可判、Deliverables 可验

A. DBM-COT 的 DOI 开源（发布主线）

类别	说明
Contract（输入） DBM-COT 仓库（ITEM ≥ #240），不少于 2 个可运行 Demo	
Contract（输出）	Zenodo DOI（版本化），GitHub Release（tag vX.Y），CITATION.cff
核心 Deliverables	README（定位＋快速入口），ITEM 索引，Roadmap
Stop-Rule	新读者 ≤10 分钟即可理解 DBM、跑起 1 个 Demo、知道如何引用
验收标准	DOI 可解析；Release 可在干净环境复现
主要风险	项目体量过大，首次阅读成本过高
回退策略	固化 *Slim Entry Pack*（3 个 ITEM + 1 Demo + 1 架构图）
演进路径	后续 DOI 版本仅增量扩展，不破坏既有引用

B. Sequence CCC 落地（算法主线）

类别	说明
Contract（输入）	ITEM #234（Two-Ways CCC），ITEM #240（CCC Kernel）
Contract（输出）	与 DBM 代码风格对齐的 Sequence CCC 实现

核心 Deliverables	Kernel、Two-Ways 协调器、DemoMain、JUnit4
Stop-Rule	Budget 生效、Two-Ways 一致、Signature 去重稳定
验收标准	多次运行：CCC 片段、评分、顺序完全一致
主要风险 过早追求覆盖所有长尾 CCC 情况回退策略	保留 MVP 内核，优先保证结构正确性
演进路径	逐步引入 Beam CCC、复杂 Stop-Rule（S1/S2/S3）

C. 两个时间序列 IR 的实现推进（应用主线）

类别	说明
Contract（输入）	既有 IR 设计（数值 IR / 非数值因果 IR ITEM）
Contract（输出）	两条可运行 IR Pipeline（共享 Evidence/Stop-Rule）
核心 Deliverables	Demo、Evidence 输出、JUnit4（预算/稳定/不变量）
Stop-Rule	每条 Pipeline ≥ 1 Demo + ≥ 3 单测
验收标准 IR 结果可解释、可复现、预算受控主要风险 过度抽象导致 Pipeline 无法跑通回退策略 缩减特征空间，保留最小可解释 IR	
演进路径	与 CCC、ACLM 共用 Stop-Rule 与 Evidence 结构

D. ACLM 跟进（平台主线）

类别	说明

Contract（输入）	ACLM SOS Chains、Calling Graph、Sequence CCC Kernel
Contract（输出）	具备"高速公路"意识的 Calling Graph 原型
核心 Deliverables	CCC 距离、Highway 提取器、Demo
Stop-Rule	主干路径可观测，且能指导资源分配
验收标准	主干重复出现、搜索震荡下降、解释清晰
主要风险	过早进行全量 $ACLM$ 集成
回退策略	限制为 $CCC \rightarrow$ 路径频率统计，不侵入主流程
演进路径	逐步融合差分树、预算调度与策略合成

路线图总声明

ITEM #243 标志着 DBM 从"结构收敛阶段"正式进入可控执行阶段。

在清晰的 Contract 与 Stop-Rule 约束下，DBM 现已具备并行推进发布、算法、应用与平台整合的成熟工程条件。