CQE Stack: Developer Guide & API

Developer Algorithms

COMPILE_FRAME(G), VERIFY(F,x), REDUCE(F,x), NORMAL_FORM(F,x), RETRIEVE, EXTEND with priced lanes. Violation vector Φ lex■decreasing guarantees termination; Church■Rosser on local rewrites supports confluence.

HTTP API (minimal)

POST /frame, /verify, /reduce, /commit, /store, /retrieve, /extend. Private mode keeps raw local; public multi■tenant forbids cross■frame by default.

Case Studies

Navigation (marsLanding): requires atm_density_known,dv_budget_known → NTER until supplied. Phase ice (iceVII): requires pressure_gpa,temperature_c → NTER gating. Symbolic tokens ('$','mirror'): OPEN with dual■witness satisfied.