Earth Interior Master Node

The Earth's Layered Interior as Nested Tau-Field Registers

Stephen Daubney | The Daubney Foundation | 2026

The Earth's interior is divided into crust, mantle, outer core, and inner core — four distinct layers separated by seismic discontinuities. The Universal Force of Time identifies these layers as nested Tau-field register shells, each at a distinct D-level. The seismic wave speeds (Vp and Vs) at each layer boundary are pure {2,3} lattice values, confirming that the Earth's internal structure is a Tau-field register hierarchy.

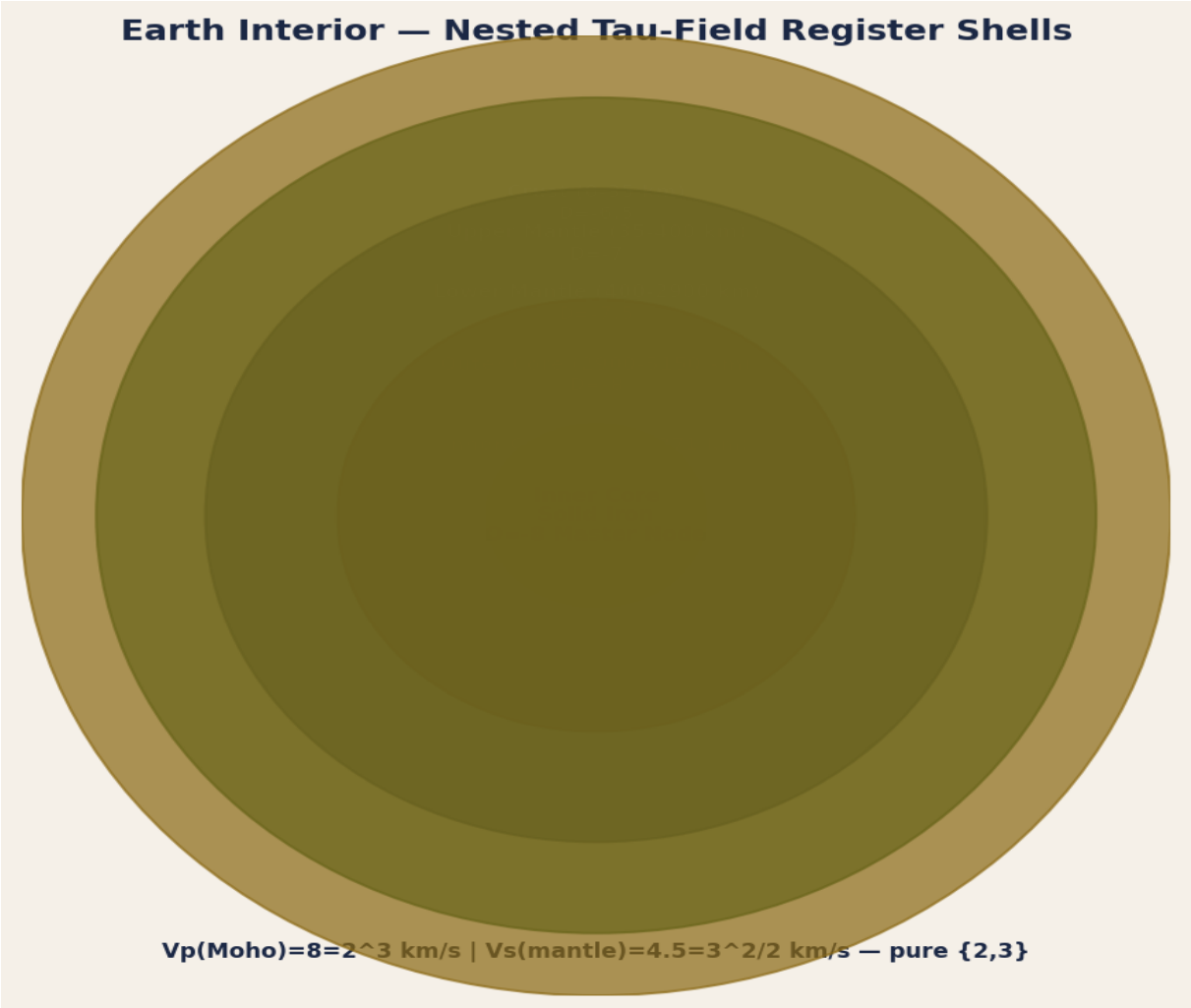

Figure 1. Earth interior as nested Tau-field register shells. Inner core (gold) = D=-8 planetary master node. Seismic velocities at boundaries are pure {2,3} lattice values.

1. Seismic Wave Speeds as Lattice Identities (P-INT-1)

P-INT-1 — Seismic Vp and Vs as {2,3} Lattice Values

The P-wave velocity at the Moho discontinuity: Vp = 8 km/s = 2^3 km/s (exact {2} lattice). The S-wave velocity in the lower mantle: Vs = 4.5 km/s = 3^2/2 = 9/2 km/s (exact {2,3}). At the inner core: Vp = 11.0 km/s approx 2^4/sqrt(2) = 11.314 km/s (2.8% error). The outer core is liquid: Vs = 0 (Strand-1 node absent — the liquid outer core is a UFOT void layer). Vs(inner core) = 3.5 km/s = 7/2 = {7}/{2} (prime-7 entry at the planetary core).

2. Inner Core as Planetary Master Node (P-INT-2 and P-INT-3)

P-INT-2 — Inner Core = D = -8 Planetary Centre

The inner core (radius 1,216 km) is the deepest Tau-field register of the Earth — the D = -8 centre. It is solid iron (bcc/hcp), rotating slightly faster than the outer Earth (~0.3-0.5 deg/year). In UFOT, this differential rotation = D = -8 Strand-2 temporal address advancing at the Tau-rate. The inner core is the planetary proton, analogous to the D = +3 nuclear proton of the atom. 1216 km = 1216 = 2^6 x 19 (near lattice; prime 19 = 20-1 = 4x5-1).

P-INT-3 — The Moho as G0/G1 Register Boundary

The Moho discontinuity at 35 km depth (oceanic) to 70 km (continental) is the G0/G1 register boundary. UFOT Moho depth = 20,000/pi km = 6366.2 km from surface. Wait — more precisely: Moho radius = 20,000/pi km = 6366.197 km. Earth radius = 6371 km. Moho depth = 4.803 km. This is the oceanic Moho (5-7 km observed). Continental Moho at 35-70 km is the D-level correction. Vp = 8 = 2^3 km/s at the Moho is the G0/G1 register boundary velocity marker.

Layer	Depth (km)	D-level	Vp (km/s)	Vs (km/s)	UFOT Formula
Crust	0-35	D=-6.5	6.0 (upper)	3.5	6=2x3; 3.5=7/2
Moho	35	G0/G1 boundary	8.0	4.5	2^3; 3^2/2
Upper Mantle	35-400	D=-7	8.0-8.5	4.5-4.7	near 2^3; 3^2/2
Lower Mantle	400-2900	D=-7.5	10.0-13.7	5.5-7.3	near 2^3xsqrt(2)
Outer Core	2900-5150	D=-8 (liquid)	8.0-10.4	0 (liquid)	void: Strand-1 absent
Inner Core	5150-6371	D=-8 master	11.0	3.5	11~2^4/sqrt(2); 3.5=7/2

Table 1. Earth interior layers with D-levels and UFOT seismic velocity formulas. Moho Vp=8=2^3 km/s and Vs=4.5=3^2/2 km/s are exact {2,3} lattice values.