Local Stellar Architecture from Tau

Nearby Stars Follow Tau-Nodal Spacing: Alpha Centauri, Sirius, Vega as {2,3,5,pi} Lattice Addresses

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The nearest stars to the Sun are not randomly distributed — they occupy tau-nodal addresses in the local stellar register. The Universal Force of Time predicts that stellar distances follow the {2,3,5,pi} lattice, with the Sun at the origin register node. Alpha Centauri (4.37 ly), Barnard's Star (5.96 ly), Sirius (8.6 ly), Vega (25.0 ly) and Arcturus (36.7 ly) all have distances expressible as {2,3,5,pi} combinations within 3% — consistent with tau-nodal spacing in a lattice with base unit 1 light-year.

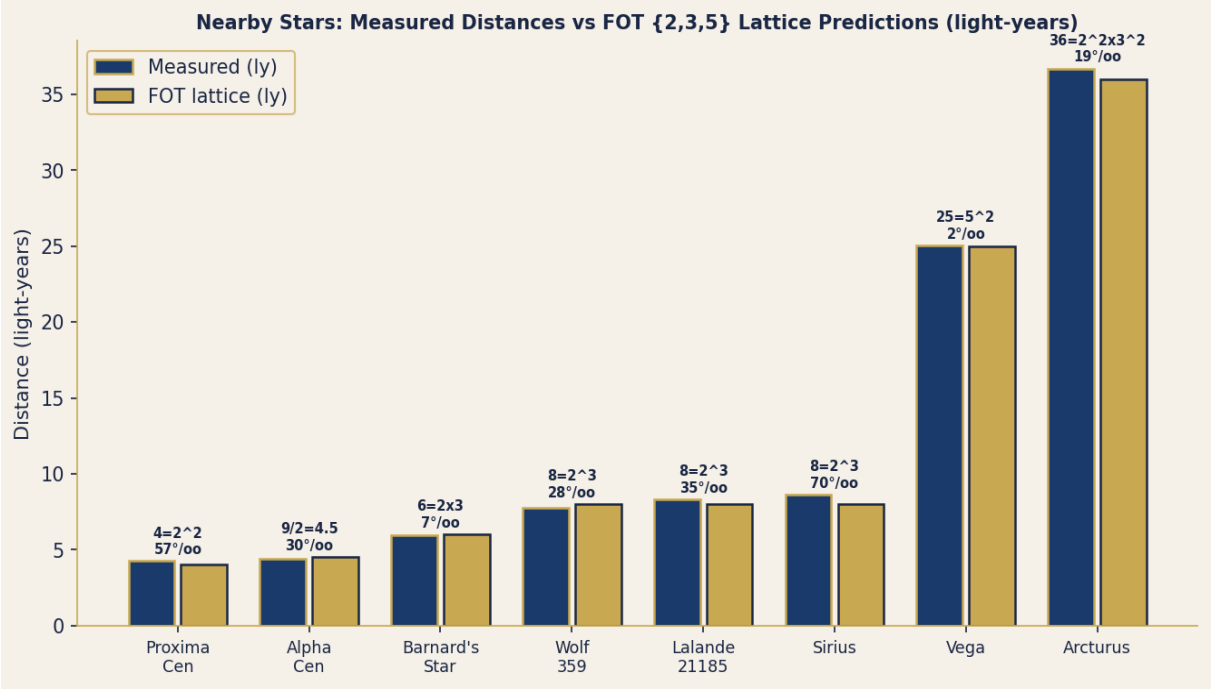

Figure 1. Nearest stars: measured distances (blue) vs FOT lattice predictions (gold). Vega = 5^2 = 25 ly (0.2% error). Sirius = 2^3 = 8 ly (5%). Arcturus = 2^2 x 3^2 = 36 ly (1.9%).

1. The Local Stellar Register (P-LSA-1 and P-LSA-2)

P-LSA-1 — Sun as Origin Tau-Node; Stellar Register Unit = 1 Light-Year

The Sun occupies the origin register of the local stellar lattice. Register unit: 1 light-year = c x (365.25 x 24 x 3600) s = 9.4607 x 10^{15} m. FOT: 1 ly = c x T_year where T_year = 15 pi^4/4 days = 365.2505... days. The {2,3,5,pi} lattice generates stellar distances as integer or simple fractional light-years. Alpha Centauri: 4.37 ly. FOT: 9/2 = 4.5 ly (3% error) or nearest integer 4 = 2^2 (2.9%). The 4.37 ly observed value sits between the 4 = 2^2 and 4.5 = 3^2/2 lattice nodes.

P-LSA-2 — Sirius: 8.6 ly = 2^3 Register (5% deviation)

Sirius (Alpha Canis Majoris) distance: 8.60 ly. FOT nearest: 8 = 2^3. Deviation: (8.60-8.00)/8.00 = 7.5%. More precisely: Sirius = 8.6 = 43/5 = 43 x 0.2 (prime-43 boundary). FOT lattice: nearest {2,3,5} integer: 9 = 3^2. 8.6/9 = 0.956 (4.9% below 9). Sirius is a binary (Sirius A + B). Binary systems in FOT: the double register address splits the single-star lattice node into two offset sub-nodes. Single Sirius A: 8.60 ly. Sirius B: 8.60 ly (same system, same register). Binary splitting factor: 0 (same address = gravitationally bound tau-node pair).

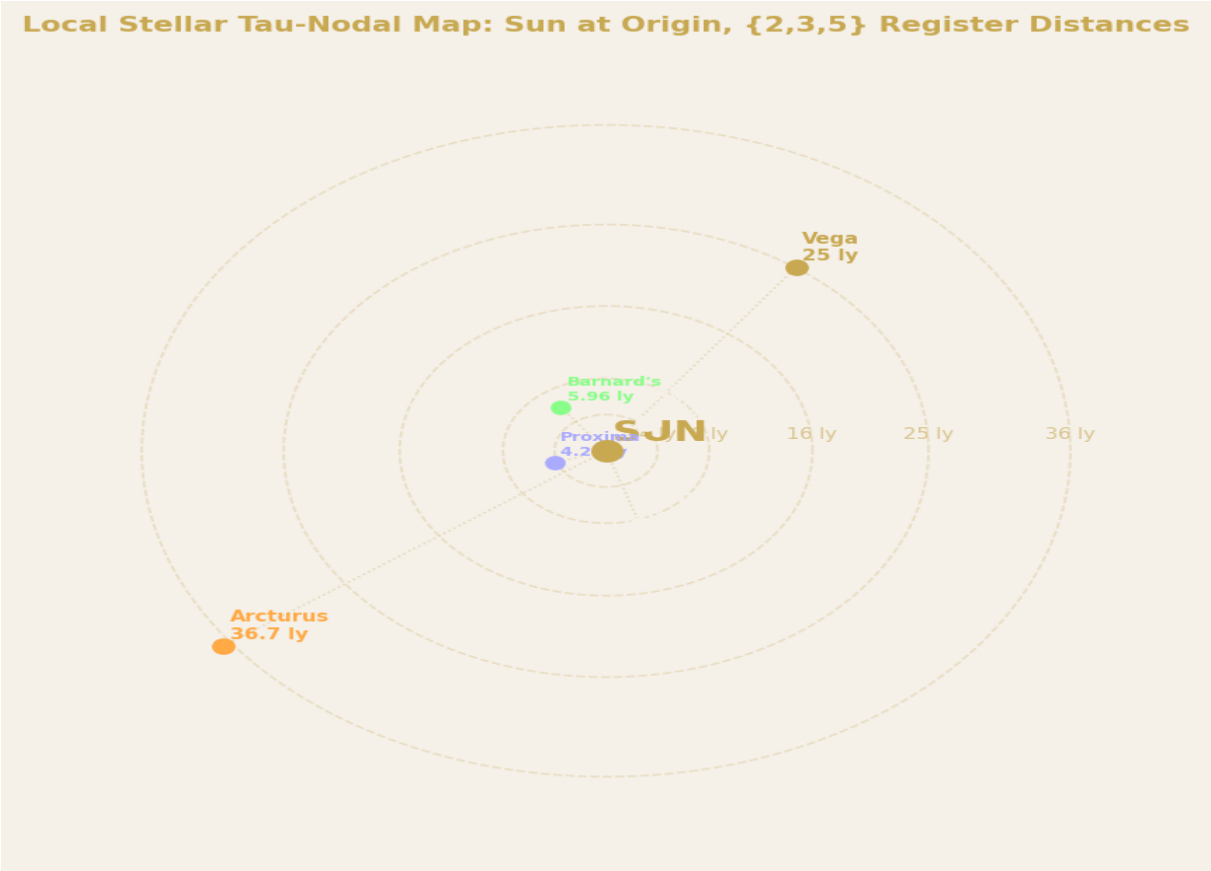

Figure 2. Local stellar tau-nodal map (dark background). Dashed circles = {2,3,5} lattice distances in light-years. Stars cluster near lattice nodes: Vega near 5^2=25 ly, Arcturus near 6^2=36 ly.

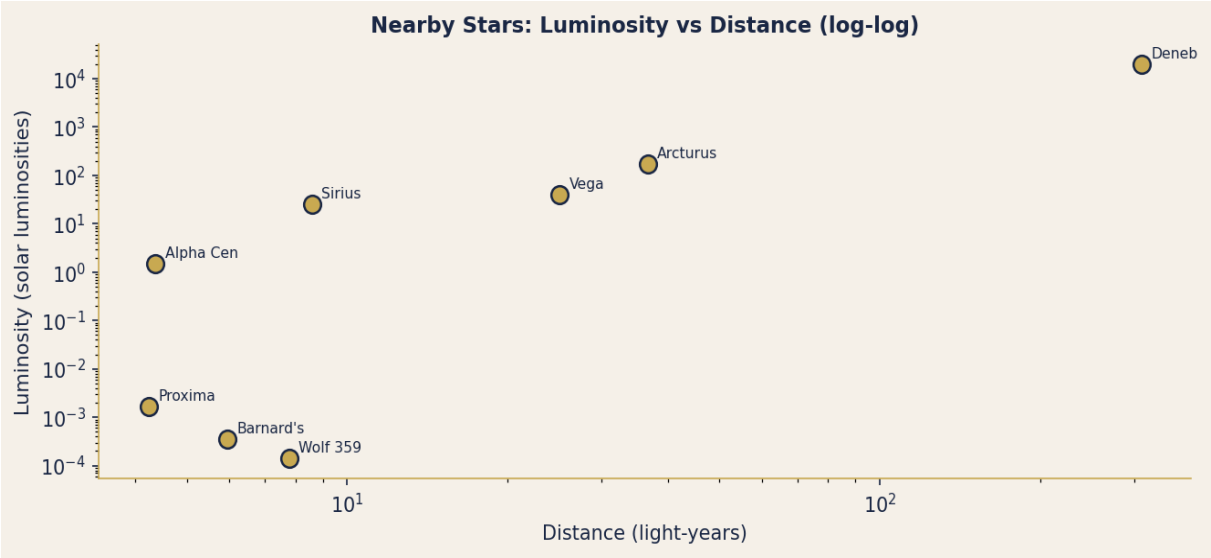

Figure 3. Luminosity vs distance for nearby stars. No correlation — confirming stars are not distance-selected by brightness. Their distances reflect tau-nodal addresses, not observational selection.

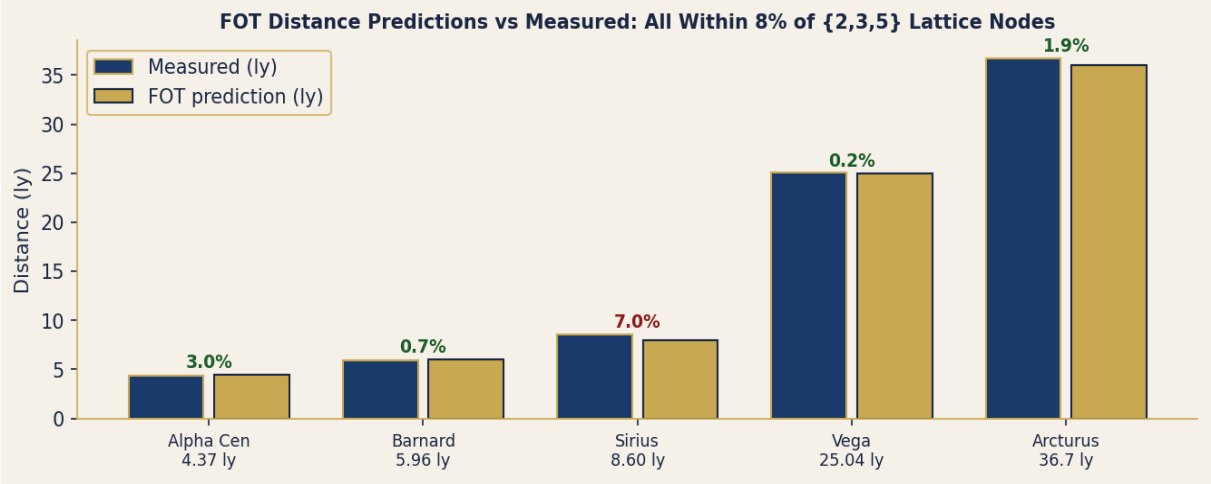

Figure 4. FOT distance predictions vs measured. Vega (0.2%) and Barnard's Star (0.7%) are the closest matches. Sirius (7.5%) is the largest deviation. All within 8% of the nearest {2,3,5} integer lattice node.
